

Purchasing Week

MCGRAW-HILL'S NATIONAL NEWSPAPER OF PURCHASING

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Vol. 2 No. 48

New York, N. Y., November 30, 1959

\$6 A YEAR U.S. \$25 A YEAR FOREIGN

Steel's Hangover: Who's Aching and How Long

Experts Seeking Signs of Hope In 80-Day Truce

Washington — Management and labor negotiators are warily eyeing the 80-day truce in the steel dispute as the big clue to 1960 prospects in railroads, electrical machinery, aircraft production and other big industry bargaining.

At the moment the prospects for peaceful negotiations are unusually dim. But what actually happens will be decided, in great measure, by whether the 80-day steel injunction is actually a "cooling off" period or—as George Meany describes it—a "heating up" period.

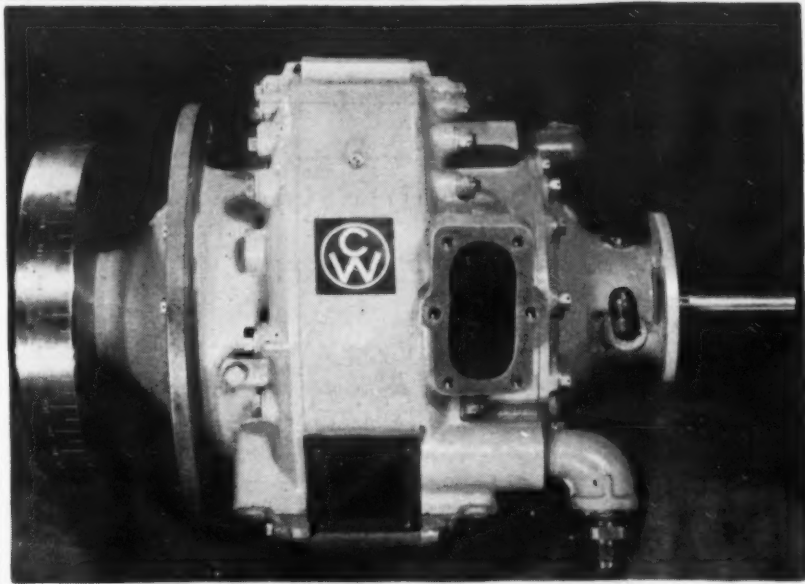
If, somehow, the steel negotiators can come up with a compromise settlement before the injunction runs out, it will take considerable pressure off other negotiations. For instance, a successful formula to handle working rules could take bargainers off the hook in coming rail talks.

However, should the steel dis-

Uncle Sam Files Charges Against Steel Companies

San Francisco — Government antitrust lawyers went into Federal District Court here last week armed with papers that charge 12 steel fabricators, six steel mills, and a trade association with conspiracy to eliminate competition.

The charges filed by the De-



DOES IT OR DOESN'T IT? Only Curtiss-Wright knows. But if this rotating internal combustion engine does what it's said to do, a motor revolution is on its way. Model is about 2-ft. long, gives 100-hp, has two moving parts.

New Engine Has Two Moving Parts

Woodridge, N. J.—The internal combustion engine must face up to some new competition. Its latest (and most serious) challenges include:

- **Rotating internal combustion engine.** It has only two moving parts, is more efficient than conventional gas engine—yet costs no more.

- **Regenerative gas turbine.** Can be mass produced on existing machine tools at a cost "comparable" to existing engines.

Curtiss-Wright made the product news of the week with its rotating combustion unit. Experts claim that if the new power unit can do everything its makers state, it is undoubtedly the most

Overseas Steel Won't Help U.S.

Despite expanding steel production abroad, foreign mills say their "protection" offerings to U. S. buyers against the resumption of a strike in January will be scant.

PURCHASING WEEK correspondents in four major steel producing countries report lengthening delivery times at many mills to meet burgeoning European demand are forcing a heavy fall-off in state-side orders. Other mills have already established a "closed door" policy on U. S. queries.

Here is a first-hand look at the foreign steel price and supply picture at the moment:

London—British steel mills only had pickings from U. S. steel strike this year and there's no indication of any upsurge in

Paper Packaging Prices Seem Destined to Rise

New York—Your paper packaging bill may be going up within the next few months. There is a noticeable industry ground swell in that direction.

One informed observer sums it up this way: "There is talk of higher board prices among producers. They may come in the first quarter of 1960."

There are three key reasons for this prospect:

- **Higher costs.** The industry costs for labor, pulpwood, chemicals, transportation, and machinery all have increased during the year.

- **Low profit margins.** Total sales and profits have increased, but the rising costs have cut into industry profit margins. A recent study showed that profit margins in the paper industry are

One of Four Industrial Concerns Hit; Many Fear Late Rebound to Normal Production Scheduling

- The steel famine has forced about one firm in four—including many that use no steel at all—to cut production.

- The steel strike comeback and inventory readjustment—even if a settlement is reached before the Taft-Hartley period expires—will extend far into 1960.

- December will see the production low point, but nearly 25% of the firms affected directly or indirectly by steel shortages don't expect to see "normal" production schedules again until next March or later.

New York—The measurements of the depth and breadth of the steel strike (see table, below) are based on returns in a PURCHASING WEEK survey that asked more than 1,000 purchasing executives to detail how the supply cut-off altered their companies' operations.

But that's only part of the steel strike story. The survey also highlighted the following aspects of the steel emergency and its over-all supply-demand ramifications:

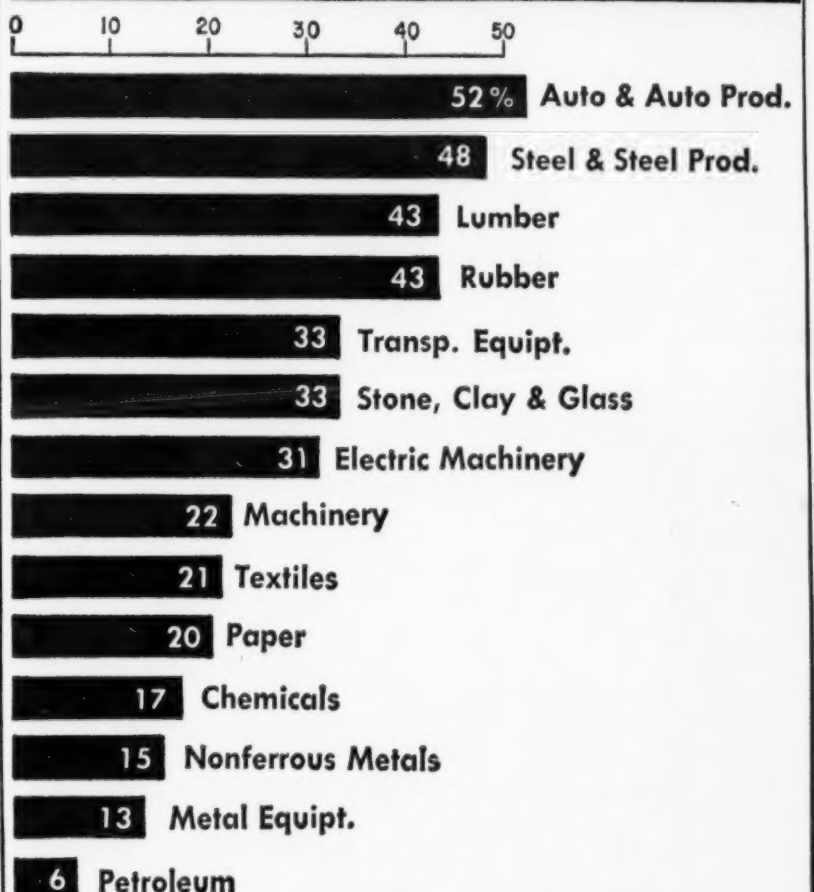
Shortages—Over 125 items in short supply are specifically listed by purchasing executives.

Production snapback—This, of course, will be staggered. But nearly one quarter of the firms affected won't be back on normal production schedules until March or later.

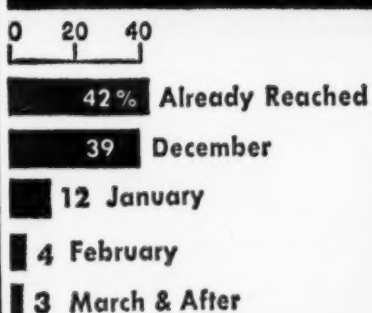
Substitutions—Shortages have tested the ingenuity of American P.A.'s. Over 25 specific material substitutions are listed—many of

(Turn to page 21, column 2)

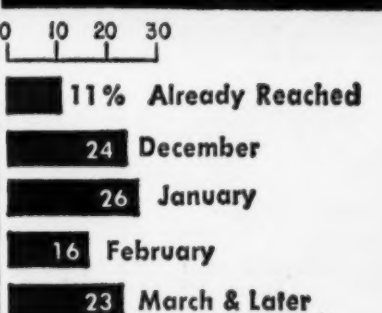
1. Strike Impact: % of Firms Reporting Curtailments



2. The Sag: When Firms Expect Production Low



3. The Rebound: Here's When They Expect It



P/W PANORAMA

- **Clever Scrounging by P.A.'s** is keeping industry alive during the steel drought. Examples: use of ice cream cartons instead of metal cans; plastic instead of steel parts. A list of 30 popular substitutions appears on p. 21.

- **Chronic Overbuying** is plaguing the airlines because requirements for the jets change so fast. Possible solutions in the wind: parts pools; more standardization; inter-airline sales of surplus; integrated data processing. (More on p. 6.)

- **Information Is Becoming Increasingly Expensive** because of costly searching. That's why Benson-Lehner's president, Bernard S. Benson, is preaching the gospel of "memory machines" and "massive information stores." How they work is explained in detail on pp. 19, 20.

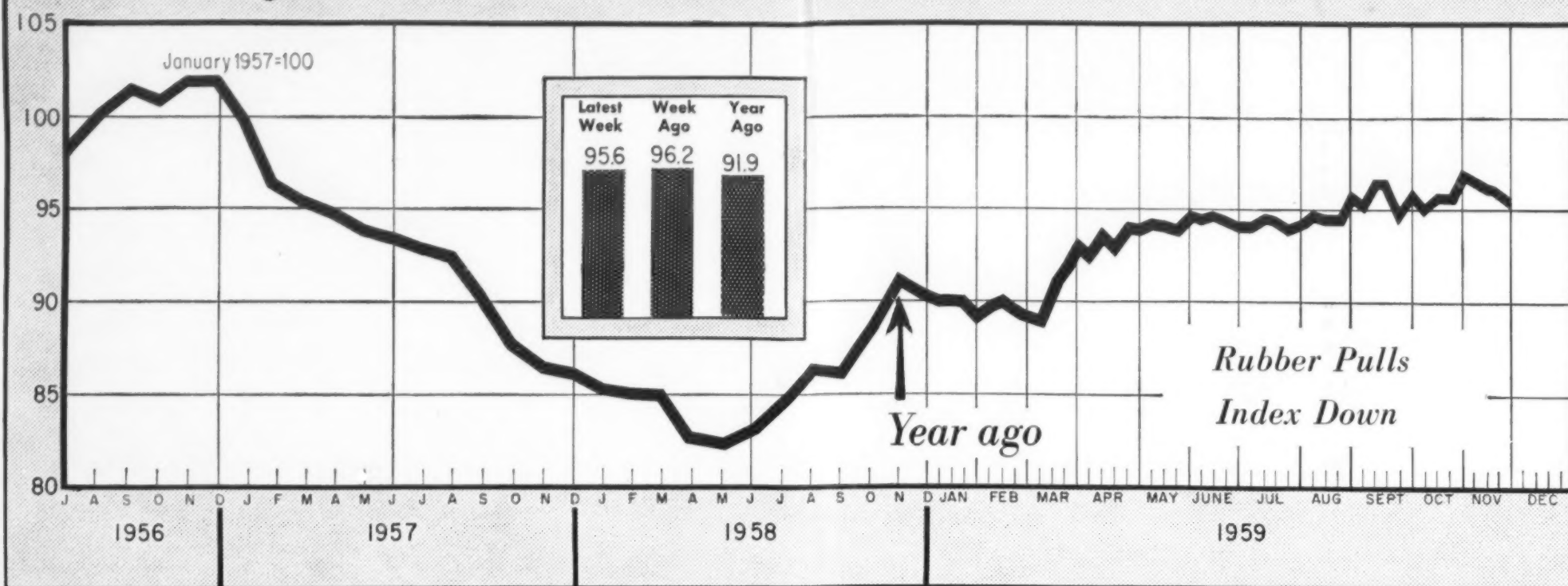
- **Parcel Post Rates** will go up an average of 17% on Feb. 1—the first hike in six years (see p. 7).

- **Plumbing Fixtures** for new homes meantime will jump 5%. While the increase doesn't affect industrial fittings right now, it probably will eventually (p. 21).

(Purchasing Perspective appears on p. 22 this issue)

Purchasing Week Industrial Materials Price Barometer

This index, based on 17 basic materials, was especially designed by the McGraw-Hill Department of Economics.



This Week's Commodity Prices

METALS

	Nov. 25	Nov. 18	Year Ago	% Yrly Change
Pig iron, Bessemer, Pitts., gross ton	67.00	67.00	67.00	0
Pig iron, basic, valley, gross ton	66.00	66.00	66.00	0
Steel, billets, Pitts., net ton	80.00	80.00	80.00	0
Steel, structural shapes, Pitts., cwt	5.50	5.50	5.50	0
Steel, structural shapes, Los Angeles, cwt	6.20	6.20	6.20	0

Steel, bars, del., Phila., cwt	5.975	5.975	5.975	0
Steel, bars, Pitts., cwt	5.675	5.675	5.675	0
Steel, plates, Chicago, cwt	5.30	5.30	5.30	0
Steel scrap, #1 heavy, del. Pitts., gross ton	42.00	46.00	43.00	- 2.3
Steel scrap, #1 heavy, del. Cleve., gross ton	41.00	41.00	40.00	+ 2.5

Steel scrap, #1 heavy, del. Chicago, gross ton	44.00	44.00	42.00	+ 4.8
Aluminum, pig, lb	.247	.247	.247	0
Secondary aluminum, #380 lb	.238	.238	.218	+ 9.2
Copper, electrolytic, wire bars, refinery, lb	.347	.347	.286	+21.3
Copper scrap, #2, smelters price, lb	.258	.258	.233	+ 7.3

Lead, common, N.Y., lb	.13	.13	.13	0
Nickel, electrolytic, producers, lb	.74	.74	.74	0
Nickel, electrolytic, dealers, lb	.74	.74	.74	0
Tin, Straits, N.Y., lb	1.013	1.013	.995	+ 1.8
Zinc, Prime West, East St. Louis, lb	.125	.125	.115	+ 8.7

Fuels†				
Fuel oil #6 or Bunker C, Gulf, bbl	2.00	2.00	2.00	0
Fuel oil #6 or Bunker C, N.Y. barge, bbl	2.37	2.37	2.37	0
Heavy fuel, PS 400, Los Angeles, rack, bbl	2.15	2.15	2.15	0
Lp-Gas, Propane, Okla. tank cars, gal	.05	.05	.05	0

Gasoline, 91 oct. reg., Chicago, tank car, gal	.115	.115	.113	+ 1.8
Gasoline, 84 oct. reg., Los Angeles, rack, gal	.11	.117	.108	+ 1.9
Kerosene, Gulf, Cargoes, gal	.086	.086	.094	- 8.5
Heating oil #2, Chicago, bulk, gal	.094	.094	.091	+ 3.3

CHEMICALS				
Ammonia, anhydros, refrigeration, tanks, ton	88.50	88.50	86.50	+ 2.3
Benzene, petroleum, tanks, Houston, gal	.31	.31	.31	0
Caustic soda, 76% solid, drums, carlots, cwt	4.80	4.80	4.80	0
Coconut, oil, inedible, crude, tanks, N.Y. lb	.185	.193	.205	- 9.8
Glycerine, synthetic, tanks, lb	.293	.293	.278	+ 5.4

Linseed oil, raw, in drums, carlots, lb	.180	.180	.165	+ 9.1
Phthalic anhydride, tanks, lb	.165	.165	.205	-19.5
Polyethylene resin, high pressure molding, carlots, lb	.35	.35	.325	+ 7.7
Rosin, W.G. grade, carlots, fob N.Y. cwt	11.95	11.75	9.60	+24.5
Shellac, T.N., N.Y. lb	.31	.31	.31	0

Soda ash, 58%, light, carlots, cwt	1.55	1.55	1.55	0
Sulfur, crude, bulk, long ton	23.50	23.50	23.50	0
Sulfuric acid, 66° commercial, tanks, ton	22.35	22.35	22.35	0
Tallow, inedible, fancy, tank cars, N.Y. lb	.065	.065	.084	-22.6
Titanium dioxide, anatase, reg. carlots, lb	.255	.255	.255	0

PAPER				
Book paper, A grade, Eng. finish, Untrimmed, carlots, cwt	17.20	17.20	17.00	+ 1.2
Bond paper, #1 sulfite, water marked 20 lb, car. lots, cwt	25.20	25.20	24.20	+ 4.1
Chipboard, del. N.Y., carlots, ton	95.00	95.00	100.00	- 5.0
Wrapping paper, std. Kraft, basis wt. 50 lb rolls	9.25	9.25	9.00	+ 2.8
Gummed sealing tape, #2, 60 lb basis, 600 ft. bundle	6.30	6.30	6.40	- 1.6
Old corrugated boxes, dealers, Chicago, ton	22.00	19.00	23.00	- 4.3

BUILDING MATERIALS‡				
Cement, Portland, bulk carlots, fob New Orleans, bbl	3.65	3.65	3.65	0
Cement, Portland, bulk carlots, fob N.Y., bbl	4.18	4.18	4.14	+ 1.0
Southern pine, 2x4, s4s, trucklots, fob N.Y., mftbm	123.00	124.00	119.00	+ 3.4
Douglas fir, 2x4, s4s, carlots, fob Chicago, mftbm	137.00	138.00	129.00	+ 6.2
Douglas fir, 2x4, s4s, carlots, fob Toronto, mftbm	108.00	108.00	109.00	- .9

TEXTILES				
Burlap, 10 oz, 40", N.Y., yd	.102	.102	.108	- 5.6
Cotton middling, 1", N.Y., lb	.329	.329	.361	- 8.9
Printcloth, 39", 80x80, N.Y., spot, yd	.219	.218	.182	+20.3
Rayon twill 40 1/2", 92x62, N.Y., yd	.24	.24	.22	+ 9.1
Wool tops, N.Y., lb.	1.59	1.585	1.49	+ 6.7

HIDES AND RUBBER				
Hides, cow, light native, packers, Chicago, lb.	.182	.185	.20	- 9.0
Rubber, #1 std ribbed smoked sheets, N.Y., lb.	.440	.475	.319	+37.9

† Source: Petroleum Week ‡ Source: Engineering News-Record

This Week's

Price Perspective

NOVEMBER 30-DECEMBER 6

The impact of the recent steel strike will linger a long, long time—and on a lot of different levels.

The special PURCHASING WEEK survey that measures the effects of the work stoppage (see p. 1) makes this crystal clear. No matter how you slice it, the 1959 strike will go down in history as having one of the sharpest non-war impacts on American business.

Many of the repercussions will continue into early 1960.

In fact some of the "forces" set in motion by the strike—like the trend toward material substitution—actually will increase in intensity.

All told, there are probably four major results of the strike that will bear watching in drawing up your 1960 purchasing blueprints.

1. REVISED PRODUCTION SCHEDULES—Industry has postponed a lot of 1959 business into 1960. But it took this survey to reveal just how strong a force this will be.

Some respondents—representing many of the nation's largest industrial firms—say that it will be another three months before output is normalized.

Equally significant, production cutbacks haven't been limited to steel makers and users.

Soft goods industries have had their share of trouble, too—mainly through drop in orders from hard-hit steel users.

This is particularly true of textiles where one P.A. summed it up this way: "The drop in demand from auto firms substantially cut into our sales of industrial fabrics. Result: Our production is down—and will remain so through December."

2. GROWING MATERIAL SUBSTITUTION—As noted above, the strike has set in motion a growing trend toward the use of substitute materials.

In a way it demonstrates the truth of the old adage: Necessity is the mother of invention.

Many firms, faced with the impossibility of getting steel, have had no alternative but to improvise. And judging from the survey, they are pretty well satisfied with the results.

One purchasing executive, commenting on his switch from steel to paper containers, had this to say: "Our substitution knocked down our packaging costs by 60%. I'd be a fool to go back to the old containers."

Most often mentioned as substitute material: aluminum and other-than-usually-employed grades of steel. But changes to plastics, paper, glass, and wool also received prominent mention (see listing p. 21).

3. NEW IMPORT TREND—Purchasing Week's survey reveals that, of the P.A.'s forced to find alternate steel sources, some 30% went to imports.

While the immediate outlook for obtaining any large supplies from foreign sources is rather dim the important contacts have been established.

Once steel supplies over the world are normalized again, it could mean another step up in imports. In fact, most importers already are talking about another steel import boom by mid-'60.

4. NEW PRICE FORCES—The trends toward more substitution and greater imports could be important factors in keeping prices within bounds.

That's not to say that current boosts due to shortages aren't important. They are—but in many cases they will prove temporary.

On the other hand, competition—both among various materials and between domestic and overseas sources—will have a permanent sobering effect on prices.

Higher Paperboard Prices Seem Likely in '60

(Continued from page 1)
below the average for the general economy.

• **Heavy demand.** Paperboard production is running about 13% ahead of last year. The feeling is that after the stable price levels of recent years, now is the time to raise them.

These conditions hold true for most grades of paper and board. For example, a price rise seems in the offing for coated papers where a strong demand has created a situation of backlog orders and allocations of supply. "My guess is that a price increase for coated papers will come in mid-1960," said one executive of a quality paper firm.

Bag Paper Down

About the only consequential soft spot in the paper picture is in bag paper. Reports on this item indicate that the price has fallen from year-ago levels—and that while demand has increased, there is plenty of stock on hand.

In general, paper prices have increased less than 1% so far this year, while production has climbed about 9% (see chart right). Comparison with year-ago levels show a little more than 1% gain in prices, and over 13½% for production.

These production figures emphasize the surge in paper consumption that the industry has been enjoying since last year. On balance, the steel strike has affected it but slightly.

Business was lost when transportation of packaged steel items dropped because of the strike, but, as some industry experts pointed out, there were a couple of compensating factors:

• Some substitution of paper for metal containers occurred. A good part of this is expected to remain as a permanent part of the expanded paper market.

• There has been a building up of packaging paper inventories in anticipation of the end of the strike. This buildup has brought these inventories to levels considered normal as compared to low hand-to-mouth inventories existing before the strike.

Paper May Follow Steel

Actually the major effect of the steel strike may come in nine months to a year. "If the steel strike results in higher prices for paper machinery," one executive said, "then paper prices will have to go up."

This is especially true in view of present expansion plans of paper companies. Paperboard, the most important paper product, is slated for 700,000 tons of added capacity in 1960—a 3½% increase, and at least the same addition in 1961.

This compares to a 1959 added capacity of less than 2% (300,000 tons), which represents the fruition of plans made during the poor demand level of late 1957 and early 1958.

The prospect for increased prices is by no means unanimous. It is the on-balance result of offsetting trends at work in the industry. Much of the industry is cautious about increasing prices for the following reasons:

• **Competition.** Many firms feel that if they raise prices—even to the bare extent of passing on costs, customers will go elsewhere. As an example, there are reports that some West Coast

P.A.'s find it cheaper to purchase their paper in the East despite freight costs.

• **Substitutes.** Plastics and aluminum foil inroads into paper markets are a threat.

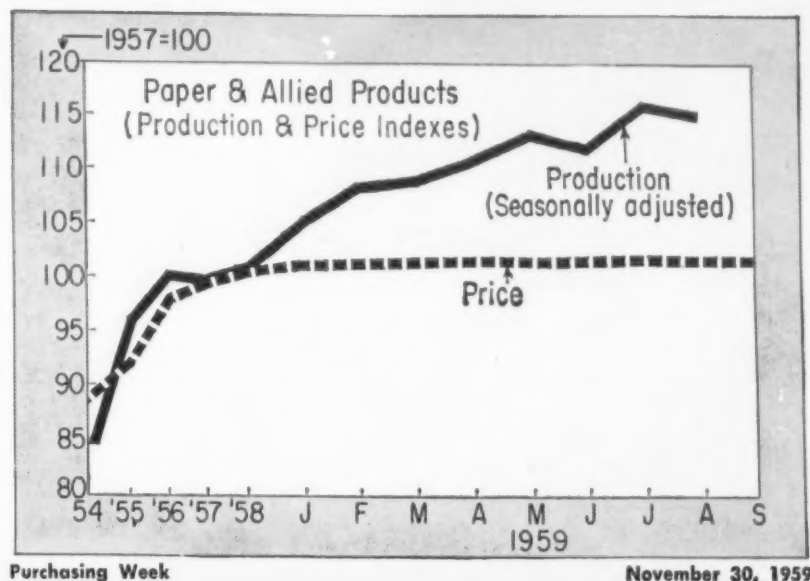
• **Excess capacity.** The industry doesn't want to return to the expensive, excess capacity situation which plagued it in recent years. This has been greatly alleviated during 1959, and, if the producers feel that increased prices will affect demand, they'll postpone raising them.

In paperboard, for instance,

production for 1959 is expected to run 93% of capacity. Last year it was 84%.

With capacity expansion imminent, and a mere 2% increase in demand forecast for 1960—largely due to the inventory buildup which took place this year—paperboard prices will rise only if it is felt that demand can handle it.

But in general, demand is expected to continue strong. One company official summed it up when he said, "Everyone looks forward to a good 1960."



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Washington Perspective

 NOV. 30-
DEC. 6

Watch for a new government report on productivity. The report hasn't been issued yet, but it is already stirring a furor among labor leaders and management officials.

The final report, now being drafted by the Bureau of Labor Statistics, is designed to show the trend in U. S. productive capacity over the postwar period and compares this with earlier years going back to 1909.

This is the first such analysis ever handed down by B.L.S. and ranks as one of the most important of its kind. It will become a basic document in debates over wage policies, inflation, and the U. S. rate of growth in comparison with Russia.

Labor and management leaders, aware of the collective bargaining implications, are putting the pressure on B.L.S. to produce a report favorable to their respective sides.

Here's what the arguments boil down to:

Labor wants to show that productivity—output per man-hour—has been gaining faster than management contends.

Both sides acknowledge that productivity is increasing every year. But labor claims that the size of the increase—or the rate—has been growing year after year down through the past decades.

For example: Nat Weinberg of the United Auto Workers contends that productivity increased slightly less than 1% in 1909. But by 1956 the rate of productivity increase each year had risen to 3.9%, according to his calculations.

Such a finding by B.L.S. would give unions an argument that management could provide progressively bigger wage increases over the years, without raising prices, out of savings gained from the accelerating rate of productivity increases.

But management claims this is distorting the figures. Management men claim the figures show that the rate of productivity increase is about the same, on the average, for each year, not an increasingly bigger rate.

Management goes along with the B.L.S. figures that show productivity in the period 1947-58 has been increasing about 3.1% a year on the average. This is a higher rate than in most prewar periods.

But here's the key distinction that B.L.S. will show: The reason for the higher rate is to be found in a spectacular doubling of the increase in agricultural productivity. This is increasing about 6.4% now.

Excluding agriculture, B.L.S. shows practically no improvement in the postwar rate of growth in productive capacity for the rest of the economy. Over-all, productivity here has been at a constant rate of increase of about 2.3% a year, according to B.L.S. This bolsters management negotiators facing union demands for more cents per hour out of productivity increases.

Vice President Nixon revamps his Cabinet Committee on Inflation and Growth.

The committee has not made much of an impression on the public so far. And it has not measured up to a major task of acting as the Administration sounding board on how to check inflation and stimulate economic growth.

Staff Director W. Allen Wallis, University of Chicago price expert, is leaving after the first of the year but will continue to advise the committee.

Nixon is bringing in Walter Fackler from the U. S. Chamber of Commerce to replace Wallis as his full-time economist. Fackler also is an expert on prices but is rated by his colleagues as being more knowledgeable in the Washington political arena.

The aims and scope of the committee are being reexamined with a view to defining them more precisely. Wallis' practice of issuing background reports on prices and inflation may be scrapped. While these reports have been scholarly, they have attracted scant attention.

Here are some points to note about Fackler: He is regarded as an able economist of conservative bent. He puts more emphasis on wages as a primary cause of inflation than does Wallis. Fackler downgrades the role of administered pricing in inflation. He is considered an international free trader.

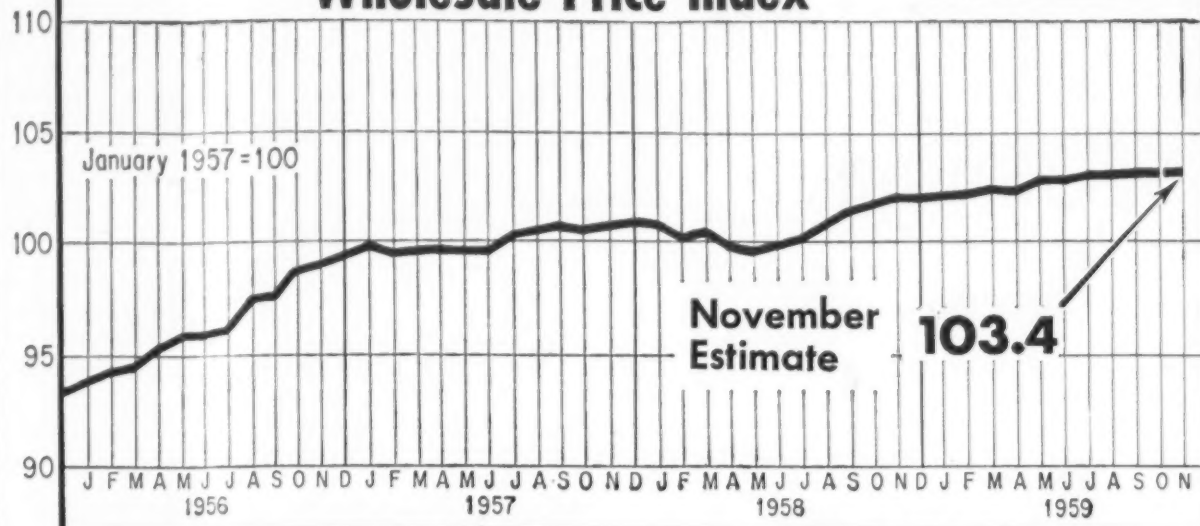
Government Files Charges Against Steel Firms

(Continued from page 1)
partment of Justice involve "re-bars" (steel reinforcing bars used in structural concrete) sold through a seven-state area served by the companies. The government says the mills and fabricators have kept general

contractors out of the \$77 million market.

Included in the list of defendants are Bethlehem Steel, U. S. Steel, Joseph T. Ryerson & Son, Inc., Flintkote Co., and the Western Reinforcing Steel Fabricators Association.

Purchasing Week's Wholesale Price Index

 Oct. 1959 103.3
Sept. 1959 103.3
Oct. 1958 101.8


Purchasing Week
Over half the component prices remained unchanged, keeping the Purchasing Week Wholesale Price Index level at 103.3. For the rest, numerous small increases offset a few sharp decreases. Leather dropped 4.2%. Other noticeable

decreases occurred in gasoline, abrasive grinding wheels, and man made fiber textiles. The noteworthy monthly increases (ranging from 1½-2½%) came among three metal-using products: industrial fittings, wire and cable, and bolts, nuts, etc.

Uncle Sam to Sell Stockpile Rubber

Washington—Uncle Sam is all set to sell off 40,000 long tons of old-age rubber at a price 2¢ below the going market price. Immediate market reaction set in, with price drops of as much as 2¼¢ for No. 1 smoked sheets. The government's announcement was the latest salvo in the long wrangle over stockpile disposal of unwanted materials. General Services Administration, the government's housekeeping agency, has between 40,000 and 50,000 tons of deteriorating rubber on hand.

Least Controversial

Of all official efforts to sell off excess supplies of strategic and critical materials, the rubber disposal issue has been the least controversial—up to now—mainly because the commodity is not produced domestically. But the new turn may create a long-run stir in the domestic rubber market, which has been running high for several months.

Last spring, Congress directed G.S.A. to abandon its so-called rotation program for rubber. Subsequently, G.S.A. let it be known it would release an estimated 40,000-50,000 long tons of rubber from its stockpiles by June 30, 1960.

Barter Rubber For Sale

Last week, however, agency officials announced that 35,000 long tons of rubber acquired through barter with the U.K. in 1940, plus 5,000 long tons of off-grade rubber would be "added to the total available supplies" from which it would sell the estimated 40,000-50,000 tons this fiscal year.

2¢ Lb. Discount

This means that between 80 and 100% of G.S.A.'s rubber disposals through next June 30 will be at 2¢ a lb. discount prices. Agency officials say that its sales under the present program are no different from its traditional disposals of deteriorated rubber under the rotation program Congress killed last spring and should not affect current prices for top-grade fresh rubber.

This Month's Industrial Wholesale Price Indexes

Item	Latest Month	Month Ago	Year Ago	% Yrly Change
Cotton Broadwoven Goods...	101.2	100.7	94.1	+ 7.5
Manmade Fiber Textiles....	98.7	100.0	97.1	+ 1.6
Leather	127.2	132.8	105.2	+20.9
Gasoline	94.5	96.7	96.4	- 1.9
Residual Fuel Oils.....	70.7	70.7	71.8	- 1.5
Raw Stock Lubricating Oils..	100.2	99.7	96.7	+ 3.6
Inorganic Chemicals	102.4	102.2	101.9	+ .5
Organic Chemicals	99.4	99.3	99.3	+ .1
Prepared Paint	103.4	103.4	103.3	+ .1
Tires & Tubes.....	89.6	90.2	102.5	-12.6
Rubber Belts & Belting.....	105.6	105.0	99.4	+ 6.2
Lumber Millwork	107.8	107.8	101.4	+ 6.3
Paperboard	99.8	99.8	100.0	- .2
Paper Boxes & Shipping Containers	101.9	101.9	101.9	0
Paper Office Supplies.....	101.2	101.2	101.2	0
Finished Steel Products....	109.2	109.1	109.1	+ .1
Foundry & Forge Shop Products	107.9	107.8	105.8	+ 2.0
Non Ferrous Mill Shapes....	95.9	95.3	91.9	+ 4.4
Wire & Cable.....	91.8	89.8	86.9	+ 5.6
Metal Containers	103.7	103.7	106.1	- 2.3
Hand Tools	110.1	109.9	107.6	+ 2.3
Boilers, Tanks & Sheet Metal Products	101.4	101.1	98.9	+ 2.5
Bolts, Nuts, etc.....	108.9	107.3	108.6	+ .3
Power Driven Hand Tools...	108.3	108.3	103.7	+ 4.4
Small Cutting Tools.....	111.2	111.2	106.2	+ 4.7
Precision Measuring Tools...	109.1	109.1	106.1	+ 2.8
Pumps & Compressors.....	111.4	111.4	105.0	+ 6.1
Industrial Furnaces & Ovens.	116.5	116.5	112.4	+ 3.6
Industrial Material Handling Equipment	105.9	105.9	103.2	+ 2.6
Industrial Scales	115.2	115.2	104.8	+ 9.9
Fans & Blowers.....	104.3	104.3	103.2	+ 1.1
Office & Store Machines & Equipment	104.8	104.6	103.2	+ 1.6
Internal Combustion Engines.	103.2	103.2	103.5	- .3
Integrating & Measuring Instruments	117.4	117.4	112.7	+ 4.2
Motors & Generators.....	103.3	103.3	104.6	- 1.3
Transformers & Power Regulators	102.1	102.1	101.5	+ .6
Switch Gear & Switchboard Equipment	108.8	108.7	104.7	+ 3.9
Arc Welding Equipment....	103.2	104.0	105.0	- 1.7
Incandescent Lamps	130.9	130.9	110.0	+19.0
Motor Trucks	109.2	109.0	105.9	+ 3.1
Commercial Furniture	105.8	105.8	105.5	+ .3
Glass Containers	106.3	106.3	106.3	0
Flat Glass	99.7	99.7	99.5	+ .2
Concrete Products	103.7	103.7	102.3	+ 1.4
Structural Clay Products....	106.5	106.6	105.0	+ 1.4
Gypsum Products	104.7	104.7	104.7	0
Abrasive Grinding Wheels...	97.5	98.7	100.3	- 2.8
Industrial Valves	116.6	116.6	104.5	+11.6
Industrial Fittings	106.4	103.8	103.4	+ 2.9
Anti-Friction Bearings & Components	91.9	91.9	93.6	- 1.8



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Application Know-How—Every Century Electric sales engineer knows motor drive systems because he sells motors and nothing but motors. Often he can give you on-the-spot answers. If not, he can turn to an engineering staff that comes up with quick answers . . . samples, quotes, drawings—whatever you need to help solve your problem.

You can get the right motor for your equipment just by contacting your nearest Century Electric Sales Office or Authorized Distributor. A Century Electric sales engineer will be glad to help you.

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Defense Dept. Seeks Help For Small Business

Washington—A new move to channel more military procurement to small business has been ordered by the Department of Defense.

The Pentagon is attaching a mandatory requirement to all contracts in excess of \$1 million that special efforts be made to use small business concerns if subcontracting work is done.

Making It Law

Actually, what the new defense regulation does is to make as a mandatory requirement what some 200 to 300 major defense contractors have been doing on a voluntary basis for some time. The voluntary participation in the "defense small business subcontracting program" by over 200 contractors during the first six months of 1959 resulted in some 18.2%—\$1.6 billion—of their total defense dollar receipts to small business subcontractors, the Department of Defense points out.

Although there are an estimated 600 to 700 so-called prime contractors handling defense work, there is doubt about the volume of additional funds that will be channeled to small business as a result of the new Pentagon move. Although exact figures are not available, a big share of contract awards over \$1 million do not call for any subcontracting.

Go Into Effect Soon

The new regulations are expected to go into effect within the next 30 days. This will be from two to four weeks before they will show up in the armed services procurement regulations. This delay is merely one of getting the new regulations printed, however.

For contractors that have not been participating in the defense small business subcontracting program on a voluntary basis, it will mean that on contracts over \$1 million where subcontracting is to be done, they must designate a small business liaison officer. It will be his job to maintain liaison between his company and the small Business Administration.

Chance to Compete

Contracting companies must also see that small business firms have "an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate small business participation," according to the new regulations.

Additionally, the contracting company must maintain records showing whether subcontractors qualify as a small business or not, and what procedures the company adopted to comply with the new regulations.

Where a subcontractor gets a chunk of business totaling over \$1 million from a prime contractor, the same "utilization of small business concerns" regulations apply to the subcontracting company for any subcontracting work it may in turn have to farm out.

Airline P.A.'s Meet to Pool Parts

Committee Investigates New Inventory Controls

Chicago—Airline purchasing agents have tackled a project to facilitate the exchange and disposal of an estimated \$50 million inventory in excess non-working spare parts.

A committee of 25 airline purchasing agents met here Nov. 18-19 to thrash out the problems of jet age buying. It was a shirt-sleeve session with the participants making a hard-hitting stab at everything from inventory controls to the increasing use of computers in purchasing activities.

The meeting was the fall session of the Air Transport Association of America's purchasing committee. The agenda was aimed at hashing out the increasing procurement problems of equipment obsolescence caused by the air carrier industry's conversion from conventional to jet aircraft.

Spare Parts Handling

The problem of handling excess spare parts drew considerable attention because, a spokesman said, "there are items just sitting on the shelf contributing nothing." An association official explained further: "We really don't know how extensive our surplus inventories are at all times and we keep adding to them every day because of the change in airline equipment."

The committee decided to expand a program that eight U.S. airlines have been working with for the last six months: compilation of a list of commonly used spare parts needed for Pratt and Whitney engines. The new project will include other airlines and will be extended to cover Curtiss-Wright engine parts as well as Lockheed and Douglas air frame parts.

The new list, to be compiled on data processing equipment of participating airlines, will be mailed to P.A.'s next January.

It is hoped the program will give procurement departments a look at industry-wide inventories, as well as an opportunity to swap items among themselves before attempting to sell them to surplus dealers or brokers. The list will be given to dealers and brokers 90 days after it is received by the airlines.

Rapid Outdating

Levin J. McLeod, general purchasing agent for Eastern Airlines, summarized the importance of the project by explaining:

"We're doing a bad job of exchanging spare parts among ourselves so far—and it's mostly because aircraft are being outdated so rapidly that we've had very little time yet to see what we actually have in inventory." Standardization of specifications for ordering parts was also discussed. But so much of equipment becomes obsolete, "even before we get it, we are leary of too much standardization."

It was learned, however, that other A.T.A. committees are working on long range plans for standardizing basic specs of such things as jet fuels, fuel storage equipment and fuel delivery equipment.

Some P.A.'s foresee the possi-



JET BUSINESS—These airline P.A.'s got together in Chicago to discuss common problems. Seated (left to right) are Levin J. McLeod, Eastern Airlines' general P.A.; Charles M. Mathews, Braniff Airways' system P.A.; and J. A. Shaunty, T.W.A.'s director of technical material. Standing (left to right) are George W. Olsen, Pan-American's purchasing manager; and H. W. Brown, executive secretary of the Air Transport Association of America. Twenty-five P.A.'s attended the two-day session.

bility of extending a new industry practice of pooling working parts for ground and air equipment at major airports.

For example—Trans World Airlines and Air France are among companies in the same geographical locality who have agreed among themselves to divide buying of certain items for similar jet aircraft.

Although suppliers did not attend the recent meeting, the group also discussed vendor coordination and such problems as delivery times, lead dates and prices.

The integrated data processing sub-committee of the purchasing committee was authorized to plan

a seminar early next year with vendors to discuss A.T.A. specification 200—a document that establishes a standard integrated data processing system designed to streamline supply transactions within the air transportation industry. Specification 200 (published in Sept. 1958) includes suggestions for using computers in compiling specifications, initial provisioning, order administration, invoicing and usage exchange.

Officers elected at the Chicago session to serve for one year were: Charles M. Mathews, Braniff Airways, Inc., chairman; and K. E. Olsen, Trans Canada Airlines, vice chairman.

Roosevelt Subcommittee Probes Produce, Wholesale Meat Buying

San Francisco—The Roosevelt subcommittee found lots of smoke but no fire in its West Coast investigation of alleged unfair purchasing practices in the canned fruit and vegetable industry.

"Our batting average is near zero in conclusive findings," Rep. James Roosevelt (D., Calif.) told PURCHASING WEEK upon conclusion of the hearings in San Francisco.

However, when the subcommittee moved into Denver to study the meat situation, the testimony before it flowed hot and heavy.

Independent livestock producers contended that buyers for giant integrated food store chains were using their power to "corral" prices and eliminate competitive marketing in the Rocky Mountain meat industry.

In referring to the San Francisco investigation, Rep. Roosevelt said, "Our findings would certainly have been more complete if we had more cooperation from the witnesses."

Some of the unfair practices allegedly engaged in by private label purchasers include the reservation scheme, by which the food chain demands the holding in reserve of stocks of food by the handler, without firm commitment to buy the withheld stock. Effect is to prevent the packer or handler from seeking

other outlets, subsequently forcing him to accept the price set by the purchaser.

Rep. Arch Moore, (R., W. Va.), ranking Republican on the Small Business subcommittee, said, "There is certainly a weird system of communication there. If we could tie together all we have heard, I'd say that a good many food chains are walking in the shadow of the Robinson-Patman Act."

In the meat investigation, L. M. Pexton, chairman of the board of the Denver Union Stock Yard Co., told the committee that vertical integration in the meat packing industry is proving detrimental not only to the livestock producers, but to the consumer as well.

Pexton explained that vertical integration occurs when the production of meat from the farm to the meat counter is controlled by contractual agreements between the grower, feeder, shipper, and retailers. Such integration creates unfair competition for the independent grower and feeder, he asserted, and impairs the normal fluctuation of prices.

Pexton said big packers and chain stores don't operate in a central market but go to the producer or set up their own feed lots and packing houses, depressing prices on the open competitive markets and destroying competition.

Phillips Petroleum, Joanna Western Mills Form Joint Plastic Film Firm

Company to Produce All Types of Polyethylene Film, Will Concentrate on Packaging Industry

Chicago—A new jointly owned firm has been formed by Phillips Petroleum Co. and Joanna Western Mills Co. to produce all types of polyethylene film.

The company, Phillips-Joanna Co., will be headquartered in Chicago, home office of Joanna Western Mills, a major producer of window shades.

In addition to customer research facilities, Phillips-Joanna's new processing plant now being completed in Ladd, Ill., will have facilities for producing linear polyethylene film as well as conventional low and medium density polyethylene.

"Phillips-Joanna will be in a position to offer a unique service to the packaging industry," said Robert F. Hrudka, sales manager. "We will be able to study each particular packaging problem and supply the exact polyethylene film needed for the job."

Hrudka said both Phillips and Joanna Western would combine their capital resources and research facilities to provide the Midwest with a reliable source of polyethylene film.

Cheaper Than Cellophane

The new linear film, made from Phillips "Marlex" polyethylene, costs less than cellophane and is more moistureproof, Hrudka explained. The linear film is especially adaptable to highspeed packaging machinery.

"Our tests have demonstrated that linear film has a vastly superior shelf life," said the new company's sales chief. "It will not dry out or deteriorate in storage, and it maintains its transparency indefinitely."

"These properties," he concluded, "make linear polyethylene film particularly useful in the following primary markets: cereals, packaged baked goods, sanitary paper items, medical products, and cigarettes and cigars."

Parcel Post Rate To Rise on Feb. 1

Washington—Parcel Post rates will be increased an average of 17.1% beginning Feb. 1, 1960. This will be the agency's first rate boost in six years.

Approved by I.C.C.

The move was approved by the Interstate Commerce Commission after being under study for more than a year. Aimed at putting the Parcel Post Service on a self-supporting basis, the new rate increases will bring in an additional \$88 million annually to Post Office revenues.

The new rate schedules apply to both Parcel Post shipments and catalogs. Increases range from 1 to 35% depending on weight and distance shipped.

What It Will Cost

The cost for mailing a package weighing from one to two pounds within a local zone, for example, will jump from 20 to 24¢. For a package that weighs 70 lb., the maximum weight allowed for Parcel Post—the local zone rate will increase from the present \$1.19 to \$1.60.

For catalogs weighing from one to one and a half pounds, the local zone rate increases a penny—from 13 to 14¢.

Duff-Norton to Transfer Its Jack, Hoist Divisions

Charlotte, N. C.—Duff-Norton Co. of Pittsburgh will transfer its jack and hoist manufacturing operations to a new 168,000 sq. ft. plant here in mid-1960.

The move involves two Duff-Norton divisions, Duff-Norton Jack Division, of Pittsburgh, and the Coffing Hoist Division, Danville, Ill. Duff-Norton Forge Division will remain in Pittsburgh.

Company official said they expect transfer and consolidation of the two manufacturing operations to result in expanded production capacities for both.

Bell & Howell Planning a Merger

Chicago—A leading supplier of aviation and missile test equipment, Consolidated Electro-dynamics Corp. of Pasadena, Calif., will merge with Bell & Howell Co., Chicago photographic equipment firm.

C.E.C. will continue to function as a separate organization, but the two companies will apply each other's products to the photographic and electronics fields.

Consolidated also produces electronic instrumentation and control systems, magnetic tape equipment for instrumentation and data processing, and vacuum

systems and controls. The company said it would now add optical and photographic techniques to its product line.

Burlington Steel Expands

Hamilton, Ont.—A \$2 million expansion program is underway at Burlington Steel Co., aimed at increasing the company's production capacity of reinforcing steel.

Burlington, which set a production record last month, said the expansion will be largely in production equipment. It will affect only the Hamilton plant.



Bridgeport Ultra Fine Grain Brass Strip Saves Siesta-Ware \$2,400 a Year



Colorful Siesta-Ware is designed to create a holiday mood...and so are the remarkable production savings realized by Benner Glass Company!

Before Benner Glass Company, Jacksonville, Fla., made the happy discovery of Bridgeport Ultra Fine Grain Brass Strip, production of the brass banding on each attractive Siesta-Ware Party Mug, Snack Jar and Tumbler was at the rate of two coils of strip running at 35 lineal fpm through three buffing stages. Today, with Bridgeport UFG Strip, the same machine runs at the rate of 48 fpm!

There's a simple reason why Benner Glass now realizes 23% time savings and 8% savings on polishing materials. It is this: the infinitely superior finish of Bridgeport Ultra Fine Grain Strip requires far less buffing. Important savings in time, cutting compound and buffing naturally result. In the annual processing of Bridgeport coiled strip, Benner saves more than \$2,400...while turning out an even better finished product!

Don't you overlook the sizable savings that can be yours when you switch to Bridgeport Ultra Fine Grain Brass Strip? To get the facts and figures as they apply to your products, call your nearby Bridgeport Sales Office...or write direct for a copy of our Ultra Fine Grain Brass Booklet, GRAIN SIZE, THE FOURTH DIMENSION. Dept. 4012.



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Committee Criticizes Transportation

Washington — Administration policy-makers who must present proposals next month for methods to modernize the nation's transportation system now have a special congressional investigating subcommittee report to consider.

The report, issued this month by the subcommittee of the House Armed Services Committee, sharply criticizes the U.S. transportation system, terming it a "picture of obsolete equipment, 19th century economics and laws, and antiquated thinking."

The report laid equal blame on both government and industry for the situation. It said that during the course of hearings held on the subject earlier this year, representatives of the various modes of transport showed great interest in praising their own industry and "none presented the dynamic outlook and hope for the future that should prevail in this era of fantastic progress."

Government agencies involved in transportation and regulation, the subcommittee

charges, "showed all too little regard" for the health and economic well being of transportation.

The timing of the report comes as the Administration begins to draw up recommendations for submission to Congress on ways to improve transport methods. The recommendations are the outgrowth of the yearlong study the Commerce Department has conducted into the subject.

The findings of the subcommittee are certain to be taken into account by Administration officials. The subcommittee recommended these steps:

- Immediate financial relief to the railroads by easing up on the "oppressive" tax burdens levied by federal, state, and local governments.
- Consolidation of roads and traffic to eliminate duplication.
- Greater use of motorized freight handling equipment.
- Greater coordination of varying transportation modes such as represented by piggyback and containerization.

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Chance Vought Aircraft Shifts Purchasing Organization Setup

Dallas — Chance Vought Aircraft, Inc.'s purchasing organization has been realigned to facilitate service to the company's five new divisions: Aeronautics, Astronautics, Electronics, Range Systems, and Research.

Under the new setup, procurement activity for the Aeronautics Division is under the direction of W. R. Keifer, materials manager, with W. H. Haugh as general purchasing agent. J. R. Bruno is purchasing agent for general purchases and W. H. Andrews for subcontracting and sub-systems.

B. A. Carlson, formerly general purchasing agent and now materials branch manager, will be in charge of purchasing for the Electronics and Astronautics Divisions. A. J. Patton will be purchasing agent for the astronautics group and Gordon Furnas for electronics.

Procurement for the Range Systems and Research Divisions also will be under Carlson's direction. Pending appointment of purchasing agents for these divisions, Patton will handle their affairs.

Benjamin Katz has been named director of purchasing, **Polarad Electronics Corp.**, Long Island City, N. Y. He has served as director of purchasing for Transmitter Equipment Mfg. Co. and the Electronics Division of Otis Elevator Co., New York. Katz is president of the Purchasing Agents of the Radio & Television Industry.



BENJAMIN KATZ

Donald C. Ross has joined **Hickok Electrical Instrument Co.**, Cleveland, as purchasing agent. Formerly purchasing agent for Gas Machinery Co., Cleveland, he succeeds **Robert L. Purcell**, now assistant secretary and assistant treasurer.



FRANK FRESH



D. C. ROSS

Frank Fresh has been named director of purchasing for **Weber Showcase & Fixture Co., Inc.**, Los Angeles. Fresh will also continue as head estimator.

The assembly and purchasing operations of the M-E-L Division (Mercury, Edsel, Lincoln) and Ford Division have been merged by **Ford Motor Co.**, Detroit. **Charles E. Bosworth**, director of purchasing, Ford Division, takes over M-E-L purchasing responsibility as general purchasing agent of the merged office.

Henry Holt Apgar and John J. McCarthy have joined **Sylvania-Corning Nuclear Corp.**, Hicksville, L. I., N. Y. as assistant manager of purchases and buyer respectively. Apgar had been purchasing agent for Foote Mineral Co., Philadelphia, and McCarthy had been purchasing agent at Fairchild Recording Equipment Corp., L. I. City, N. Y.

B. E. Marchant has been promoted from assistant purchasing agent to purchasing agent by **Skydyne, Inc.**, Port Jervis, N. Y.

O. G. White succeeds A. H. Hilverkus as director of procurement for **Chrysler Corp.'s Defense Operations Division**. Formerly director of the division's manufacturing staff, White also will be responsible for functional guidance of procurement activities for the company's Defense Group. Hilverkus has been named special assistant to the division general manager, a new post.

Charles E. Jorgensen has been made purchasing agent and production control supervisor, **Jorgensen Conveyors, Inc.**, Milwaukee.

E. J. Byington, warehouse manager for **Oak Farms Dairies**, Dallas, has been advanced to purchasing agent.

Robert Rosendahl has been named purchasing agent for **Babcock & Wilcox Co.'s Milwaukee plant** succeeding the late F. S. Perkins. Bertram A. Miller, formerly steel buyer, succeeds Rosendahl as assistant purchasing agent.

H. D. Yaw has been appointed purchasing agent, **Dallas Transit Co.**, Dallas, succeeding Val Layne who died in August.

Gilbert R. Miller has retired as purchasing agent, **Ohio Fuel Gas Co.**, Columbus, after 47 years with the firm. Miller is a past president of the Columbus Association of Purchasing Agents.

Peter V. Tremblay has been named executive assistant to W. George Gress, director of purchasing, **Gillette Safety Razor Co.**, Boston. Tremblay, who joined Gillette of Canada, Ltd., in 1954 as manager of purchases, succeeds Paul G. Saurwein who became manager of materials and source development, a new post.

Obituaries

Joseph I. Kitchin, 70, retired purchasing agent for **Lanston Monotype Co.**, Philadelphia, died Nov. 2. He was a past president of the Purchasing Agents Associations of Philadelphia and a former vice president of the National Association of Purchasing Agents.

William E. Smith, purchasing agent since 1957 for **Anso, Binghamton, N. Y.**, died Nov. 7. He was 52. He had previously been purchasing manager of **Laboratory of Furniture Co.**, Mineola, L. I., N. Y.



The cost of ALLEN Hex-Socket Cap Screws is only a minor fraction of your assembly costs . . . be sure you're getting the timesaving, cost-saving advantages of genuine Allens!

Ever since Allen first produced the hex socket head screw nearly fifty years ago, specifying *genuine Allens* (made by Allen of Hartford) has been a sure way to guarantee dependable threaded fastening.

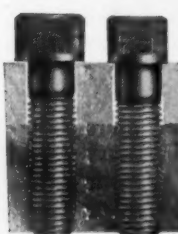
Only *genuine Allens* have Leader Points that make starting easier, and greatly minimize danger of cross threading. *Genuine Allens* are "pressur-formd" to preserve the long fibers uncut throughout the length of the screw, giving stronger sockets for greater tightening torque.

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Allen's new 1960 Series Socket Head Cap Screws give up to 2½ times more load carrying capacity, without indentation.

Head diameter of sizes from ¼" up is now uniformly 1½ times the body diameter—providing more under-the-head bearing surface, and a proportionate increase in clamping force. Write for new Bulletin G-25, with full specifications.



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Foreign Perspective

NOVEMBER 30-DECEMBER 6

Stockholm—A second trading bloc has been set up in Western Europe, creating additional problems for American traders and investors. The "Outer Seven" nations have signed a tariff-slashing pact designed to unite the trade potentials of Great Britain, Sweden, Norway, Denmark, Switzerland, Portugal, and Austria.

With the Euromart combination of France, Germany, Italy, Holland, Belgium, and Luxembourg now completing its first year of operation, it's now a question of wait-and-see as far as European trade is concerned. An overriding question arises whether the seven nation European Free Trade Association (F.T.A.) will serve to bring its members into some kind of association with the Common Market Aggregation. Like the Common Market, the F. T. A. establishes a broad preferential tariff area.

Britain and the remaining members of the Outer Seven set up their trade-tariff organization after they were unable to agree with the Common Market group on a way to establish an all-Europe trading bloc. However, most British industrialists, for example, just don't want a trade split in Europe. And there are plenty who think like them along the Euromart countries such as West Germany and Holland.

The Stockholm agreement calls for the seven nations to eliminate trade barriers among themselves by 1970. They plan their first tariff cut—of approximately 20%—by next July 1.

The situation adds up to increasing jitters for the United States and other exporters and importers trying to maintain competitive positions in Europe.

Moscow—Chemical equipment is high on the shopping list of Soviet buyers. Part of the reason is disappointment in Russia's own production goals. Throughout 1959, the Soviets have reported domestic production of chemical equipment consistently short of what their planners had expected.

(Other items in the "short of target" category include gas, freight cars, big electric engines, and electric locomotives.)

At a recent Central Committee meeting, V. S. Fyodorov, head of Russia's chemical industry, said it was important for the Soviet Union to import whole new plants and new technological processes from the West and socialist countries. He specifically named Britain, West Germany, Sweden, Italy, and France.

Despite the equipment lag, output from Russia's "Chemical and rubber industry" hasn't fared too badly. Output for the first nine months of this year is up 10%—only slightly below the 12% rise in gross industrial output.

And if you look at some of the individual products, the output figures for the first nine months of this year are quite impressive.

Synthetic resins and plastics are up 14%. Cellulose ethers are up 12%. Other big rises are reported for polychlorvinyl resin and co-polymers (up 18%), synthetic ethyl spirits (up 47%), and synthetic fatty acids (up 59%).

Bonn—German firms are stepping up the drive to capture a larger portion of Iron Curtain trade.

It's a continuation of a trend that set in last year when trade with the Reds jumped close to 5% of total German trade (after years at the 3-4% level).

The drive has the approval of most German officials. Manufacturing concerns,

Soviets Upgrade Consumer Durables

Moscow—The Soviet government has ordered general improvement in the quality of consumer durables, ranging from coffee percolators and electric irons to sewing machines and bedsteads.

Deploing heavy, uneconomic design of Russian household goods, the order instructed regional governments to "take steps to extend the variety and improve the quality . . . of household goods."

The decree, issued by the Communist party's Central Committee and the U.S.S.R. Council of Ministers, suggested establishment of "designing-technological" bureaus at major factories producing consumer durables.

More specifically, the order called for greater use of plastics and new thermoinsulating materials in refrigerators "with due consideration for achieving the highest possible coefficient of utilization of space and of the inner side of the door in order to reduce expenditure of metal and consumption of power."

The order called for mass produced:

- Electric appliances (coffee percolators, teapots, irons, and stoves) with automatic regulators and clocking.

- Automatic washing machines with centrifugal wringing devices, "assuring reduction in their size and weight, and improvement in finish and operational qualities."

- Lighter, longer-lasting motorcycles, bicycles, and motor scooters.

- New and more advanced models of straight-seam and zig-zag sewing ma-

chines of "improved appearance" to replace "old-fashioned makes."

- Transistorized radio sets, phonographs, TV sets, and tape recorders with plastic instead of wooden cases.

- TV sets with kinescopes having ray deflection angles of no less than 110 deg., and voltage regulators. (The order also called for "organization of TV repair shops.")

Even lampshades were ordered improved by replacing silk with plastic materials no later than 1961. Westerners living in Moscow generally believed the decree resulted at least partly from Khrushchev's American tour.

Daimler-Benz to Take Over Bayerische Motorenwerke

Munich — Daimler-Benz, Germany's largest car-maker in terms of sales value, will take over the financially shaky Bayerische Motorenwerke, producer of the 300 c.c. Isetta.

Bayerische (B.M.W.) will continue production of the Isetta, along with motorcycles and a 700 c.c. baby car. Daimler-Benz said it will stop B.M.W. production of luxury cars that have lost ground steadily against the competition of the parent company's product.

For Daimler-Benz, the acquisition will mean added production facilities that may cut down on long delivery time of Mercedes cars.

industrial associations, and government officers call this a "favorable" and "pleasant" development—and are doing everything possible to promote this campaign publicly.

Important journals carry out in special numbers "Propaganda for the Eastern Trade Partner." Big banks compete in making special studies of the economy of these countries—relying on nothing more than the material supplied by the Communist governments.

Especially big gains are reported in trade with China—which now has supplanted Russia as chief Communist trade outlet.

Part of the jump represents a diversion of Chinese trade away from Japan—toward Germany. Actually it fits well into the German economy because German metal products and industrial goods are traded for raw materials.

Russian trade also may be in for a rise. Officials here hope that the activities of the recently established Soviet Trade Representative in Cologne (in September 1959) will help do the trick. They also look for increased trade from the recent cultural agreement between the two countries which calls for the Exchange of Industrial-Commercial delegations between the two countries.

Tokyo—Japan is joining the rest of the Free World in easing restrictions on U. S. exports.

It comes close on the heels of similar action by England and France (see P. W., Nov. 16, '59, p. 16).

New announcement reveals that Tokyo will modify trade bars on 4 classes of imports from the "dollar area" in January. Items affected are copper alloy scrap, gypsum—and both Lawan timber and Abaca fibre from the Philippines.

"FASTER FROM FOSTER"

PIPE from one of the world's largest warehouse stocks

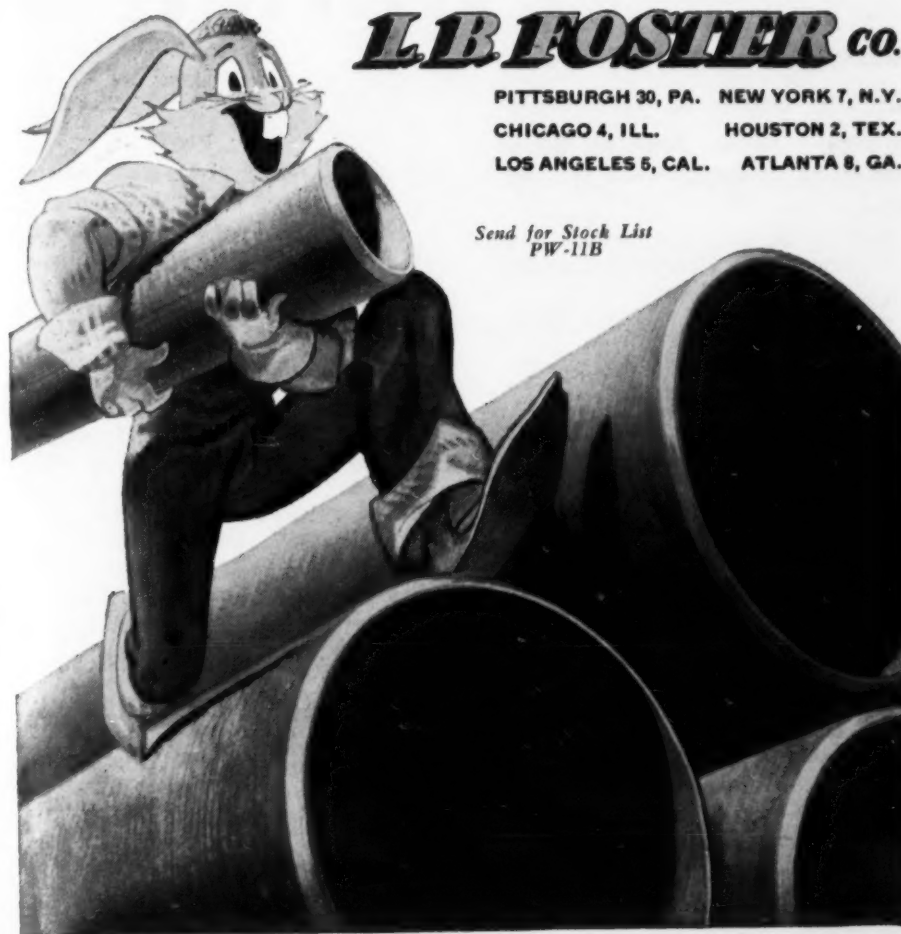
Whether it's a routine order, or an emergency demand for unusual or hard-to-get sizes, depend on delivery "Faster from Foster," when and where you need it. L. B. Foster Company's six nationwide warehouses stock every kind of pipe. Tested and Structural Steel Pipe 1/8" thru 48", Stainless, Seamless Alloy and Pressure Pipe, Aluminum, Wrought Iron and PVC Pipe in all sizes, walls and specifications.

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PW-11B



P/W MANAGEMENT MEMOS

A collection of timely tips, quotations, and inside slants on management and industrial developments, along with a run-down of events and trends of use to the purchasing agent.

Finding Overseas Suppliers

U.S. Department of Commerce Trade Mission Division has set up an impressive schedule of trade missions in the next few months to such places as India, Pakistan, and the United Arab Republic. And American purchasing agents looking for materials or components—but so far unsuccessful in their search—have only to submit a Business Proposal to a Trade Mission (in triplicate) answering the following questions about their needs:

- What type of product do you wish to purchase in the country of interest?
- Will you consider a joint venture with a qualified firm?
- What type of company will be qualified to handle your business?
- Do you want to trade direct or through an agent?
- Are you hunting sources of supply for particular products, materials, or services either (A) for direct importation or (B) as an agent of a foreign firm?
- Have you had previous experience or business connections in the country of interest?

Send your answers in triplicate to *Trade Missions Division, U.S. Department of Commerce, Washington 25, D.C.*

Purchasing and Cost Reduction

"Let's Look at the long range cost reduction possibilities in purchasing . . . a high-rate of inventory turnover is . . . a . . . prime means for cost reduction that lies within the province of the purchasing department, or, if it does not, to my way of thinking, should be purchasing responsibility. Here again, a specific goal should be set and performance regulated accordingly. This seems like an elementary consideration, yet it is one that . . . is frequently ignored." Thomas J. Ault, president of Saco-Lowell Shops before the Young Presidents Organization.

Theft and Its Cost

If you're concerned with inventory discrepancies, you'd do well to listen to these words of Management Consultant Norman Japan:

"Employees are stealing more than \$4 million in cash and materials every day throughout the United States. In 1958, employee thefts and malpractices forced more than 200 business firms to close their doors. Compared to these thieves, the professional criminal is an amateur."

Jaspan's main point is this: Management blindness to internal dishonesty is a major contributory factor in this huge drain of corporate profits. Whether it be tolerance of petty pilferage or looking the other way when you know of a kickback arrangement, the net effect is a weakening of the whole corporate structure.

Jaspan has said that if the ethical standard of many businesses were brought up to par, prices could be cut 15%.

Electrical Hints

The purchasing agent with a sharp eye for electrical services in the plant can be a first-rate help in cost reduction, boost his usefulness to top management. Things to watch, as signs of growing obsolescence: . . . fast growth of plants in your area . . . could mean your main substation might go up in fireworks through new, higher surges of current . . . overheated equipment . . . a sure sign of dangerous overloading . . . high electrical downtime . . . insurance company warnings . . . all are signs of danger.

See Yourself Here?

Psychologists are saying it's a rare boss who knows what his subordinate's job entails in all its detail. According to a University of Michigan communications study. The reason is fear. Fear that the boss will react badly at the report of problems. Fear that the boss only wants to hear success stories. It's a form of "Yeshmanship" and—in the long run—isolates the subordinate from the help his boss could give him.

Short Pointer:

If you ever wear a red tie, consider its effect on others: Scientists say red elevates the pulse rate while blue depresses it. Designers steer clear of hard reds in room decorating.

Follow-Up

'Steel Gets the Blame . . .'

Lima, Ohio
On the front page of the Nov. 9 issue you have an article entitled, "Steel Gets Blame for New Inflation."

How can we secure a copy of Otto Eckstein's report—a special study of the causes of inflation?

R. D. Johns
Director of Materials
Superior Coach Corp.

• Copies of this report ("Study Paper No. 2, Steel and Postwar Inflation") are available from the Joint Economic Committee, U. S. Congress, Washington, D. C. See the Nov. 23 issue for a detailed summary of the report: "As Steel Prices Go, So Goes U. S. Inflation, Says Congress' Survey," pp. 16 and 17.

Demand Forced a Reprinting

Boston, Mass.
In the Sept. 21 issue of PURCHASING WEEK, it was reported that our publication, "Make or Buy" by James W. Culliton, is out of print ("Books You Can Use to Boost Buying Knowledge," p. 19).

Because of a continuing demand for this study, we reprinted it in 1956.

Ruth Norton
Graduate School of Business
Administration
Harvard University

Hard Hat Wired for Sound

Chicago, Ill.
In the Nov. 2 issue (p. 1) there was a picture of a Dow Chemical oil field worker wearing a safety hat which had incorporated in it a two-way radio.

We are interested in learning more about this product and would appreciate your telling us from whom we can find out the specifications of not only the helmet but also the radio installation.

F. A. Rappleyea
Director of Research
John T. Riddell, Inc.

• It is a product of the Electrical Research Laboratories of Dowell Division, Dow Chemical Co., 1645 East 21st St., Tulsa, Okla.

Out of the 'Squeeze'

Wilmington, Del.
In the Nov. 16 issue of PURCHASING WEEK, page 1, you referred to Hercules Powder Co. developing new machinery for rapid and more efficient production of plastic containers that will make present equipment obsolete in two or three years ("Everybody's Squeezing In on the Plastic Container Boom").

This should have read: "The entire industry is directing its efforts to developing new machinery," not Hercules Powder Co., as we are not engaged in this type of development work.

W. O. Bracken
Cellulose Products Department
Hercules Powder Co.

To Our Readers

This is your column. Write on any subject you think will interest purchasing executives. While your letters should be signed, if you prefer we'll publish them anonymously.

Send your letters to: "Follow-Up," PURCHASING WEEK, 330 West 42nd St., New York 36, N. Y.

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Postmaster . . . Please send form 3579 to Purchasing Week
330 W. 42nd St., N. Y. 36, N. Y.

Should the P.A. or the production man decide what quantity inventories to carry?

Question asked by: R. J. Betschart, Purchasing Agent
Greer Hydraulics, Inc., Jamaica, L. I., N. Y.



R. C. Herdrich, vice president in charge of purchasing, Rolled Steel Corp., Skokie, Ill.:

"The purchasing agent should have decision making power as to the quantity of inventory—but this decision should be made only after other relevant department heads have been consulted. The decision should reflect the consensus of the purchasing, production, and sales departments. Some of the factors which must be considered are available purchase discounts, economic advantages of running larger quantities, sales potential for the product being manufactured, plus the over-all company-cost picture. Regardless of the company's size, I suggest that the P.A. call and preside over a monthly inventory meeting involving the other department heads I mentioned, in order to consider their recommendations in reaching inventory decisions most beneficial to the company's total operation."



J. M. McTavish, general purchasing agent, Commonwealth Services, Inc., New York:

"It appears one of the two must make this decision, as we assume a material manager is not involved. For this reason I feel it should be joint decision, and the production man should give the purchasing agent quantities used per year. With such figures, the P.A. can then decide how much to buy and when, based on economic order quantity buying. This again requires a knowledge of all costs incurred."



H. G. Perkins, director of purchasing, Stanley Home Products, Inc., Easthampton, Mass.:

"Here such a decision is not made by any one individual or department. We have a forecast provided by the sales department and it is our policy to maintain an average of 10 weeks' finished goods against this. It might drop to seven or eight weeks after periods of high sales and build up to 12 or 13 weeks in lower sales periods. Similarly, our raw material inventory is based on a theoretical 10 weeks on hand, fluctuating between eight and 12 weeks in practice. Within these ranges, the purchasing agent schedules incoming shipments and places maximum orders for economical purchasing. The basic decision on inventory quantities has been made by management."



R. C. Mueller, purchasing agent, Murphy Diesel Co., Milwaukee, Wis.:

"The purchasing agent in doing his everyday job accumulates all the information necessary to set inventory quantities: from management—inventory policies; from manufacturing—the parts that need special consideration for the shop; vendor salesmen provide estimates of present and future conditions that must be reckoned with; purchasing periodicals provide more information to use as a guide. He is in the best position to decide."



H. I. Goecker, director of purchasing, Joseph Dixon Crucible Co., Jersey City, N. J.:

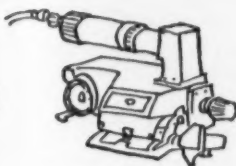
"The purchasing agent and the production man should work together in establishing quantity inventories, lead times, and ordering points. Because of the P.A.'s knowledge of markets and conditions that arise, we believe the P.A. should have the prerogative to make the final decision on quantity—thus enabling him to make quick decisions and take advantage of changing conditions affecting his company."

USS Complete Strapping Service

brings you the new Model 13 !

The first portable semi-automatic round steel strapping machine . . . completely air-powered

Model 13

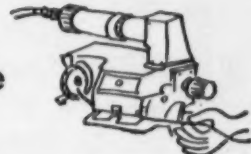


takes the effort



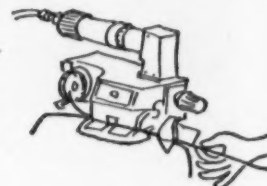
out of

strapping. All you do is thread the machine



drape the strapping around pallet or package, slide

strapping into the slot



and with a twist

of your wrist,



air power draws the strap

to a pre-determined tension, and then a reverse

twist



ties and trims the strap.



That's all!



The machine uses 12- to 15-gauge

round steel strapping, is portable,



or can be

suspended



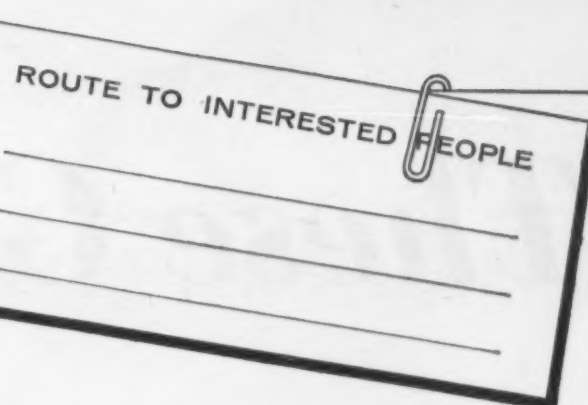
for production line use.

Please fill in the coupon for further information.



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Please send me a free copy of your Model 13 brochure describing in detail this new Pneumatic Strapping Machine.

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CITY _____ STATE _____

These Goggles Saved a Man

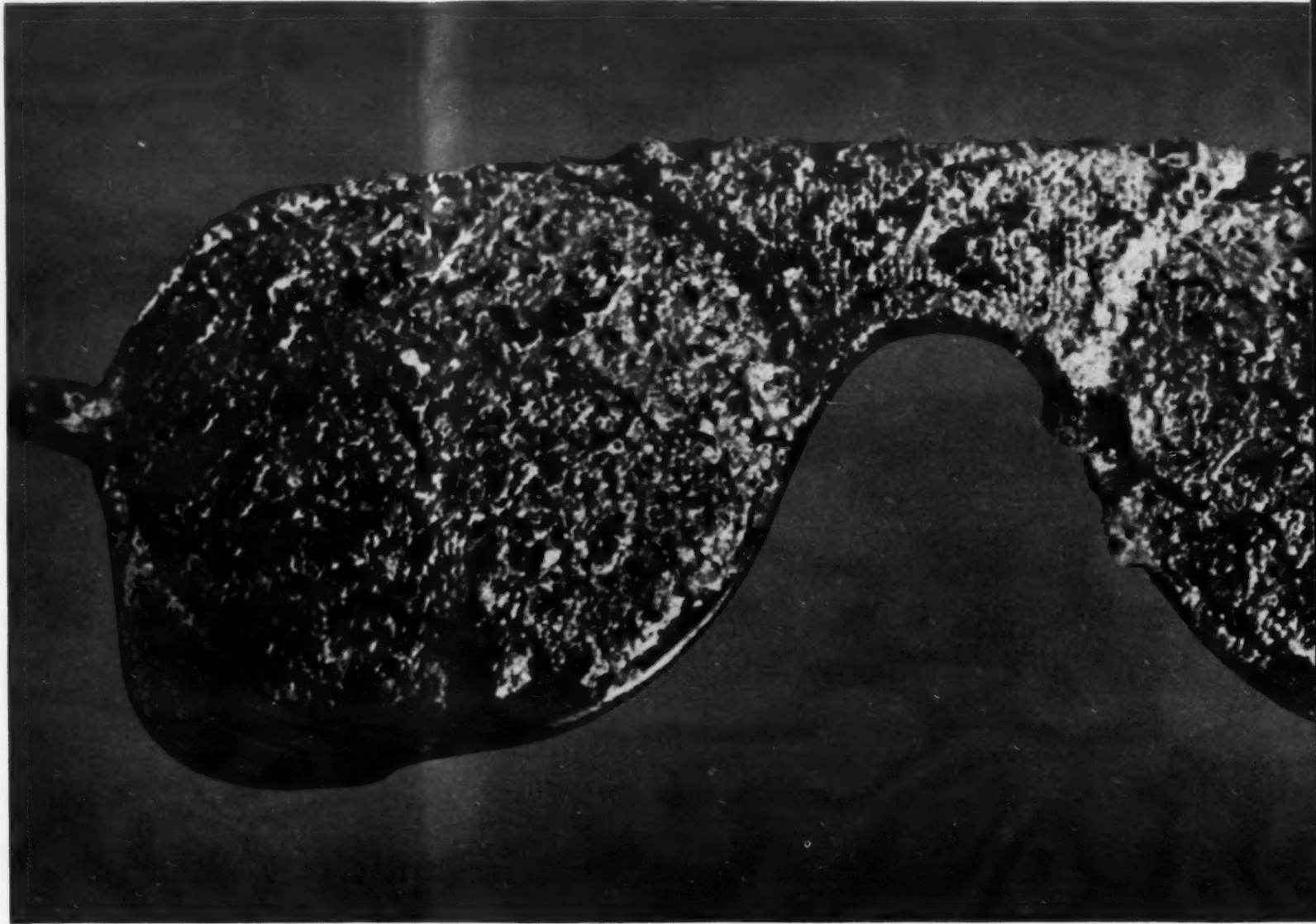
Hot metal splashed without warning toward the workman's eyes. But these heavy-duty goggles stopped it before it could do any damage. Alert buying by the plant purchasing agent played no small part in saving this man's life.

The National Safety Council reports the industrial accident frequency and severity rate has been going down since World War II—BUT . . .

- About 2-million persons experience disabling injuries annually in the U. S. in the course of their employment.

- Over 1,000 workers a month will suffer death in an average year in the U. S.

- Almost \$4 billion is estimated to be the total cost of industrial accidents each year.



PATTERN MAKING: Inexpensive saw guard (\$35) is the thickness of the saw blade minus the set of the saw. This particular pattern shop tried many guards, settled on this.



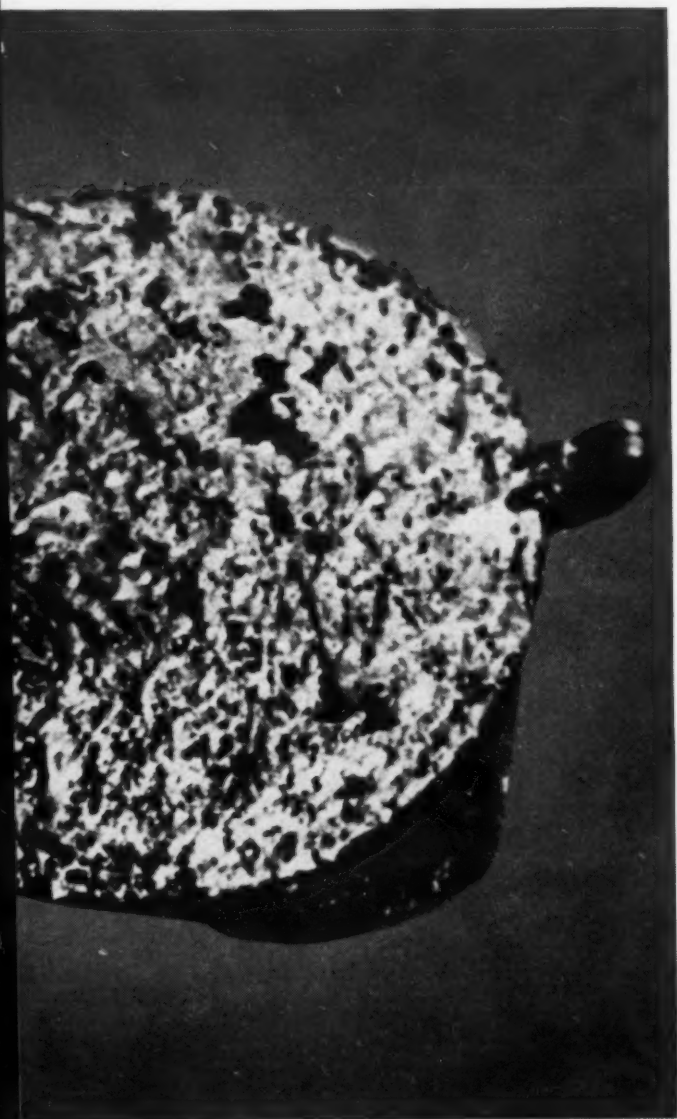
MATERIAL HANDLING: Fork-lift trucks backing up have mowed down more than one unwary workman. Simple solution: Add a back-up bell (see right rear tire). Cost for attachment is about \$10.



HEAVY HOISTING: This special self-locking guides hook to self-locking position. Falling de

's Life

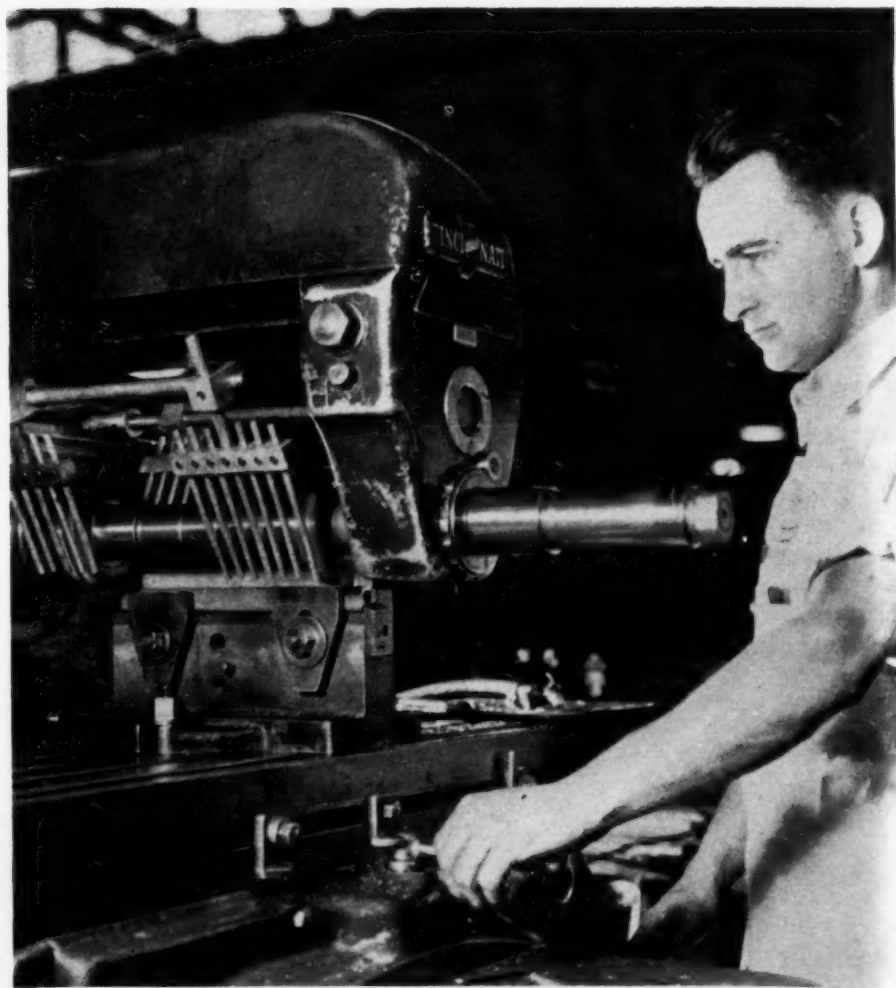
and this equipment is promoting better safety in . .



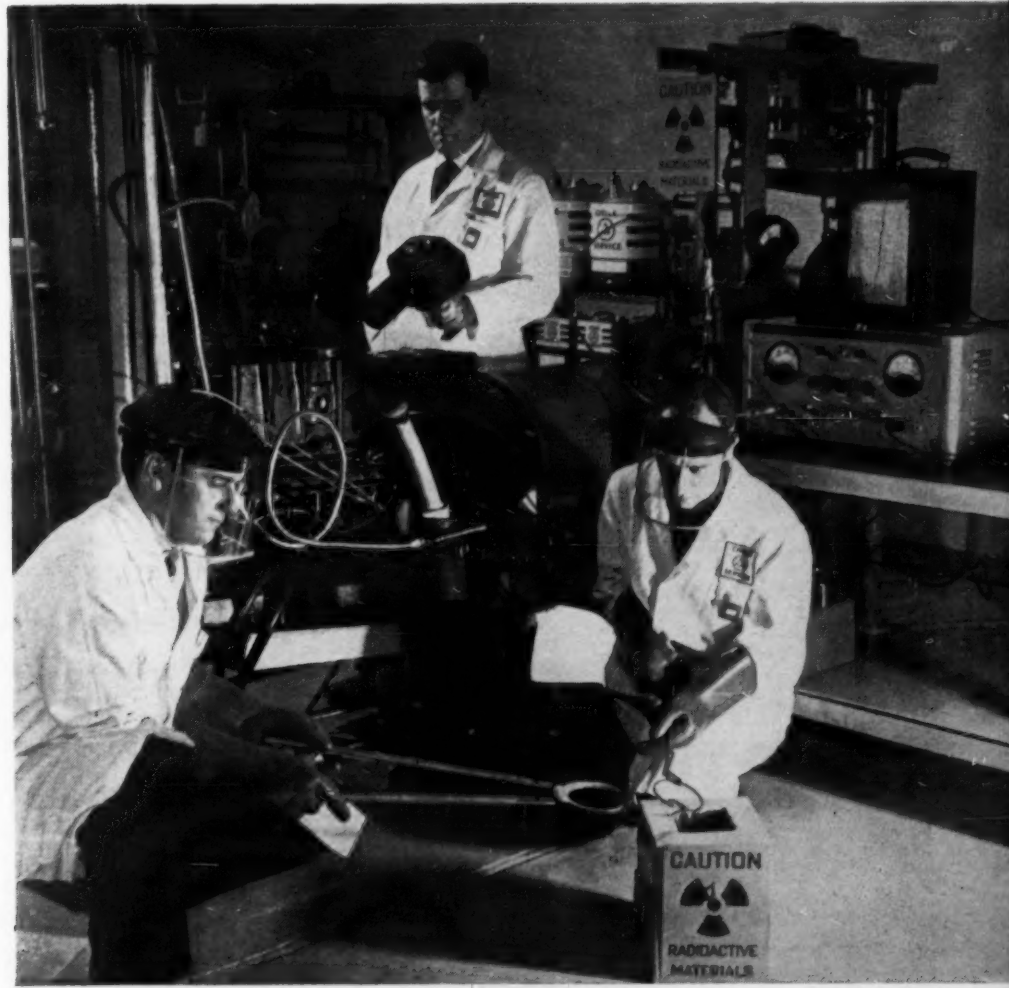
GRINDING OPERATIONS: Lung-disturbing airborne particles like those created by this granite-grinding operation are easily carried off by an exhaust apparatus (right).



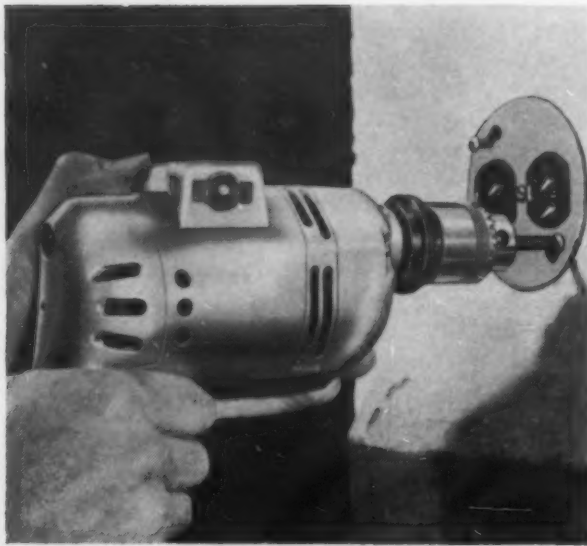
ELECTRICAL MAINTENANCE: The simple addition of a lock on plant switch box can save a company from lost man-hours by contact with 'hot' electric wires.



MILLING OPERATION: This finger guard (lattice-like attachment) was developed by employees of International Business Machines Corp. themselves, helps assure full protection during milling, once a dangerous operation.



RADIOACTIVE EXPOSURE: Tongs, rubber gloves, and lead blocks are all basic safety tools in working with radioactive materials. Also, top-flight house-keeping helps in disposal of debris and thus reduces the danger of radiation.



Drill

Converts to Driver

Single, hand-held unit can be used as drill or power screwdriver. Drill sizes range to: twist-drill; $\frac{3}{8}$ in.; wood augers to $\frac{3}{4}$ in.; masonry bits up to $\frac{1}{2}$ in.; and hole saws from $\frac{5}{8}$ to $1\frac{3}{4}$ in. Spindle collar is turned to convert it to screwdriver. Unit is equipped with reversing switch.

Price: \$59.50. Delivery: Dec. 21.

Black & Decker Mfg. Co., Towson 4, Md. (P.W., 11/30/59)



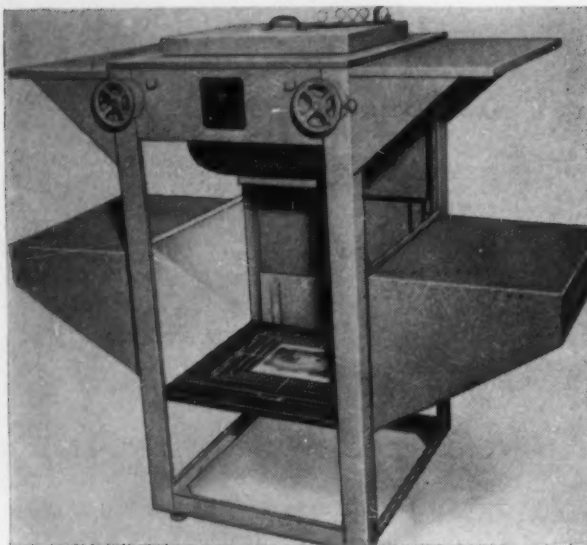
Finish Remover

Cuts Corrosion

Stripping fluid takes off hard to remove finishes without corroding magnesium, steel, aluminum, or brass. Removes epoxies, polyurethanes and the new acrylics, as well as conventional paints, lacquers, and enamels. After application, the treated finish swells, pops loose, and is flushed away with water. Metal surface is left clean without damage to the bonderizing or phosphate coating. When dry, part can be refinished.

Price: \$2.50 a gal. (55-gal. drum). Delivery: immediate.

Beck Equipment Co., 3350 W. 137th St., Cleveland 11, Ohio. (P.W., 11/30/59)



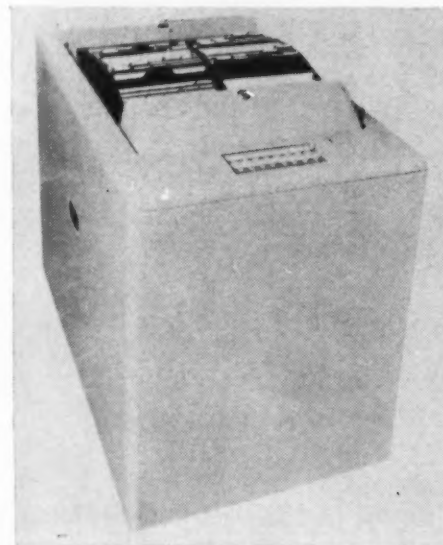
Copying Camera

Wide Angle Lens

Standard lens makes possible enlargements and reductions up to $2\frac{1}{2}$ times the original. Balanced lighting throughout entire range of camera settings eliminates need to adjust for every exposure. Tracking and calibration controls enable 24-in. camera to expose line, half-tone negatives to 18 x 23 in.

Price: \$1,698. Delivery: 2-3 wk.

M. P. Goodkin Co., Dept. P, 112 Arlington St., Newark 2, N. J. (P.W., 11/30/59)



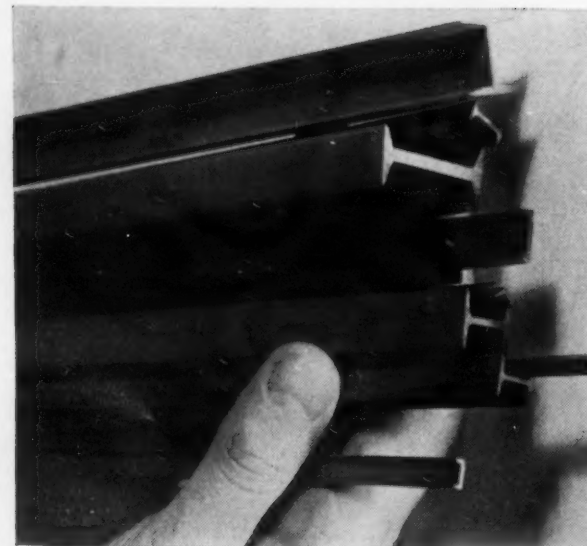
Rotary Card File

Has Push Button Controls

To find a card, clerk touches button and control system automatically stops proper drum when the desired section reaches position in front of operator. Up to 15,000 active records may be stored in the two-drum rotary card file. The cards open into a V form for quick reference and fast refiling. Single power source operates both drums.

Price: \$880. Delivery: 60-90 days.

Mosler Safe Co., 320 Fifth Ave., N. Y. 1, N. Y. (P.W., 11/30/59)



Plastic Shapes

For Model Building

Structural shapes are made of steel gray impact polystyrene and are available in I, H, angle, channel, and Tee shapes. Sizes range from $\frac{1}{8}$ to $1\frac{1}{4}$ in. Standard plastic parts permit model builder to construct mock-up in the laboratory for test situations.

Price: \$.20 to \$1.10 (per 30-in. length). Delivery: immediate.

Industrial Models, Inc., 2311 Sconset Rd., Wilmington 3, Del., (P.W., 11/30/59)



Bench Welder

Makes Critical Welds

Light-metal ram operating in lineal ball bearing sleeve and precision diaphragm cylinder adapt machine for fine, critical welding work. Model shown in photo is equipped with special tooling for welding 0.042 in. stainless steel wire to stainless tubing with 0.045 in. wall and I.D. of 0.312 in. Unit is air-actuated, has adjustable holders, and comes equipped with foot switch. Available in 5 to 50 kv. models.

Price: \$1,000 (less control). Delivery: 5 wk.

Universal Electroweld Div., Electric Arc, Inc., 152-1 Jelliff Ave., Newark 8, N. J. (P.M., 11/30/59)



Coin Changer

Has 3-Coin Capability

Change maker accommodates up to \$1,100 in change that may be dispensed in 3 combinations. Unit is designed for use with vending machines in plants or offices. Machine has interchangeable units that permit substitution of one change unit for another.

Price: \$425. Delivery: immediate.

Standard Change-Makers, Inc., 422 E. New York St., Indianapolis 2, Ind. (P.W., 11/30/59)



Oilers

Full Stream or Drops

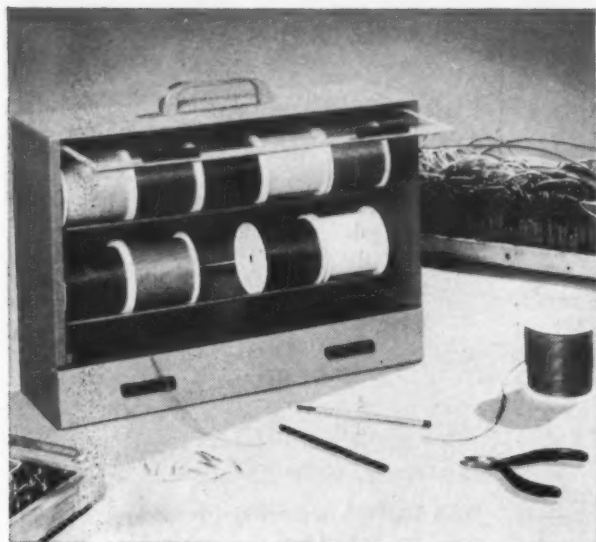
Oilers, guaranteed for 5 years, have leakproof steel bodies and either rigid-angle or flexible spouts with pump mechanism to provide close control when oiling machinery and hard-to-reach places. Depending on pressure applied to finger lever, oiler will deliver either full stream or drops. Broad-base design will prevent accidental tilting. Capacities range from $\frac{3}{4}$ to 2 pints; spouts are 6 and $7\frac{1}{2}$ in. long.

Price: \$2.50 to \$3.70. Delivery: immediate.

Eagle Mfg. Co., 3040 Charles St., Wellsburg, W. Va. (P.W., 11/30/59)

New Products

Another PURCHASING WEEK service: Price and delivery data with each product description.



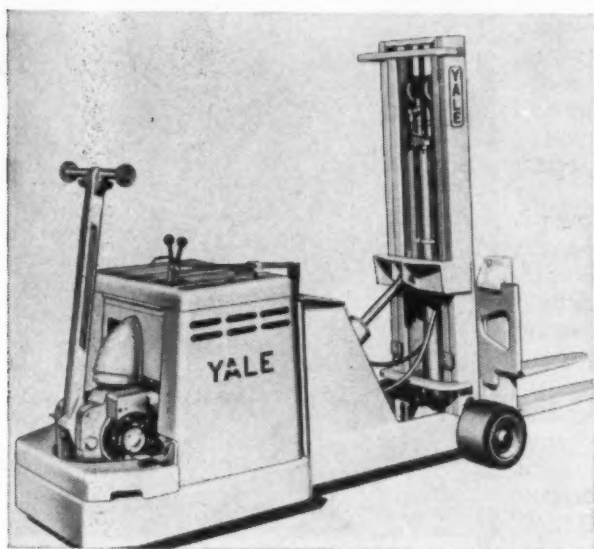
Wiring Kit

For IDP Control Boards

Portable kit contains all tools and materials needed for wiring any type IDP control board. Kit contains 10 spools of 200-ft. color coded insulated wire, 2,000 terminals, pliers, and wrapping and seating tools—all in one compact, portable case.

Price: \$98.50. Delivery: immediate.

Clarkson Press Inc., 189 Van Rensselaer Ave., Buffalo 10, N. Y. (P.W. 11/30/59)



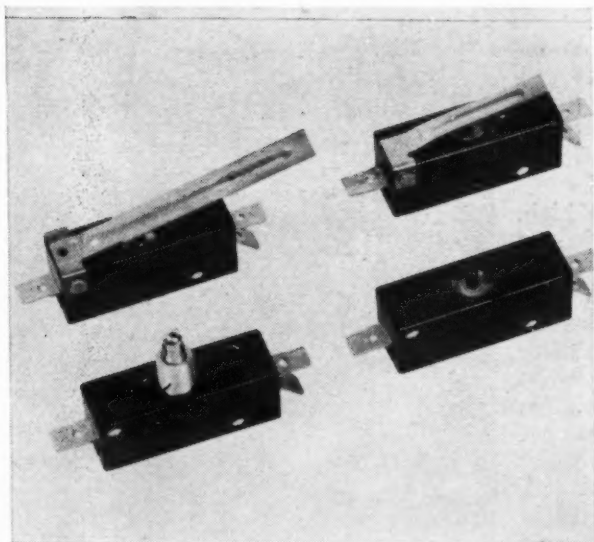
Lift Truck

3-Speeds

Rider-walkie lift truck operates with series-parallel, electric motor which runs on a 12-v. battery and provides 3 speeds up to 6.3 mph. Motor design gives as much as 33% higher efficiency than previous models. Truck has 3,000-lb. capacity.

Price: \$1,856. (pallet model). Delivery: 10-12 wk.

Yale & Towne Mfg. Co., 11000 Roosevelt Blvd., Phila. 15, Pa. (P.W., 11/30/59)



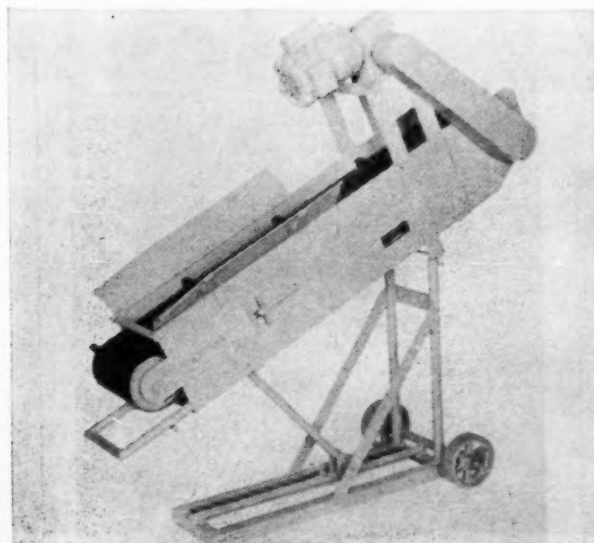
Switch

High Current Capacity

Series of snap action switches in pin plunger, lever action and panel mounting models. High current capacity of switches enables direct control of circuit. Each is non-sensitive to vibration and shock. Rated at 15 amp., 125 v.; 10 Amp, 250 v., and 1/2 hp, 125/250 v.

Price: \$1.10 to \$1.71. Delivery: immediate.

Controls Company of America, 9555 Soreng Ave., Schiller Park, Ill. (P.W., 11/30/59)



Conveyor

Adjusts to Job

Portable conveyor units, mounted on wheels, quickly adjusts (in height and incline angle) to meet job requirements. Available in belt widths of 4 to 24 in. and lengths from 4 to 10 ft. Standard belt feed is 65 fpm., other speeds obtainable by changing sprockets.

Price: \$310. Delivery: 2 wk.

Bosworth Mfg. Co., 34250 Mills Rd., Avon, Ohio. (P.W., 11/30/59)

This Week's

Product Perspective

NOVEMBER 30-DECEMBER 6

You'll be hearing more from the industrial designer.

The value of good design has long been recognized in the consumer business—the way a product looked was as important as what it did. Now, the day seems to be fast approaching when the same will hold true for industrial goods.

Two examples: M. S. Curtis, engineering vice president for Warner & Swasey tells this story: "Last September we were among the exhibitors at a textile machinery show in Milan, Italy. One of the machines we exhibited, and of which we were very proud, was what we call a 'pin drafter'. It was unquestionably the best pin drafter in the show—but unfortunately we had not done any industrial design on this particular machine.

"In another booth not far from ours—was another pin drafter—distinctly inferior to ours as far as speed, productivity, etc. But where do you think the crowds flocked? Around our machine, the best functional machine in the show? No! Around the best looking machine. This wouldn't have meant much if the crowd were sightseers, but practically every one of these men was looking for something to buy.

PURCHASING WEEK ran into a similar situation at the Packaging Show in N. Y. One company exhibited a beautifully styled, modern looking bag filling and forming machine. It contrasted with the surrounding equipment much the way a 1960 auto stacks up against a 1935. "We're not rearranging old models and reintroducing them," noted a company representative. "From now on whenever we bring out a new machine it will be restyled from top to bottom. It will be just as functional as the next man's machine, but it will look like it belongs in the modern plant."

• Curtis spoke before the American Society of Industrial Designers at its annual conference in New York earlier this month. As he sees it, industrial design means more than appearance. Its main job is handling the human function—the contact points between the product and human beings.

This science has a name. It's called "ergonomics." This makes it the designer's job to produce a machine that is designed for optimum operator ease and convenience—and thus maximum productivity. Curtis showed slides of some Warner & Swasey redesigns. On the old machine the operator had to move two feet sideways to shift gears, had to step back to operate the levers, then had to get up close to check the work. All of this moving was tiring and 100% unproductive. Relocation and redesign of the controls made it possible for the operator to remain in one position.

When choosing a piece of equipment keep this in mind: The well designed piece of industrial equipment allows the operator to perform almost all functions in the normally "at ease" posture, with no awkward positions. The controls are logically organized for almost instinctive operation, and the user can operate it without any unnecessary movement.

• Warner & Swasey take this a step farther. It practices "integrated design." The theory is that similarity between pieces of industrial equipment helps products sell each other. It builds in recognition features that identify different products as members of the same family. All control panels—whether turret lathe or automatic—have similar organization, color schemes, etc.

The company says that its experience has indicated that an integrated design of a complete product line makes purchases "habit forming". When purchaser and operator are used to one family of products they tend to stay with it.

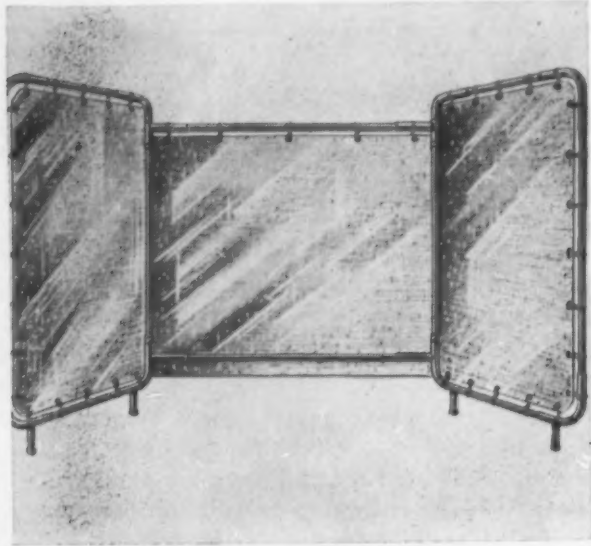
Fresh design thinking also can cut production costs. Working in many different fields, the designer frequently comes across techniques and materials that may escape plant engineers. Form simplification can reduce complexity and thereby production time. The old gag that the ambition of an engineer is to design a part that can't possibly be made is too often true. Today's jets and missiles need some real weird shapes. The industrial designer, who is primarily form conscious, can do much to remold such parts to cut manufacturing costs.

Curtis sums it all up this way: "While you cannot successfully sell a machine in competition with one that functions better, no matter what the appearance of your product, neither can you successfully compete against a better looking machine if it functions as well as yours."

It's a good point for the P. A. to think about.

Your Guide to New Products

(Continued from page 15)



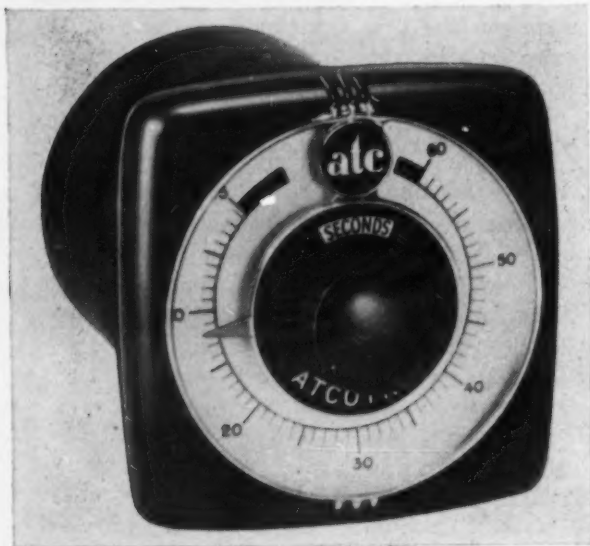
Welding Screen

Reflects Heat, Flame

Portable screen is made of 1-in. tubular steel and has curtain material of aluminized asbestos that will withstand up to 1,400 F. Screen protects against radiant heat and flame by reflection. The 4-ft. size weighs 35 lb. and may be moved by one man.

Price: \$28.50 to \$340. Delivery: 1 wk.

Singer Glove Mfg. Co., 860 W. Weed St., Chicago 22, Ill. (P.W., 11/30/59)



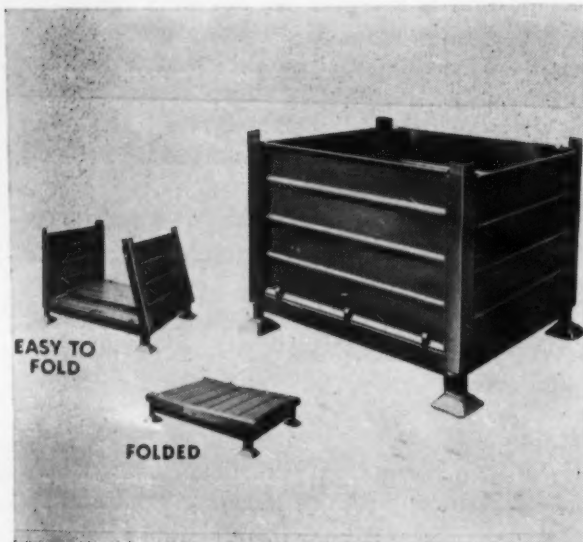
Timer

Operates Relay

Transistorized timer operates a relay at the end of timing cycle to actuate machinery engaged in die casting, packaging, spot welding, conveyor control, etc. Choice of six time cycles varying from 0.02 to 1 sec. through 1 to 120 sec. It is rated for 3 million operations.

Price: \$62-\$77. Delivery: 8-10 wk.

Automatic Timing & Controls, Inc., King of Prussia, Pa. (P.W., 11/30/59)



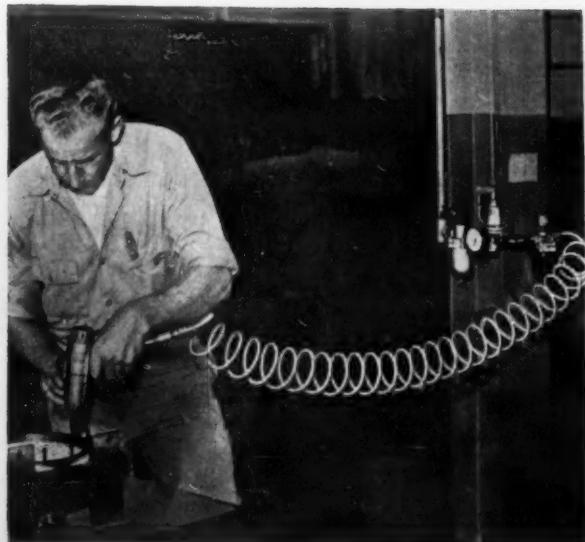
Storage Boxes

Will Fold Up

Keyhole locking device and hinges permits folding up steel containers for storage or return transit. Folding is accomplished by one man lifting and lowering the sides. It can hold materials in bulk lots for storage or shipping. Size is 48x40x24-in.

Price: \$75.20. Delivery: immediate.

Palmer-Shile Co., 15997 Fullerton Ave., Detroit 27, Mich. (P.W., 11/30/59)



Air Hose

Self-Storing

Hose with maximum working length of 20-ft. will coil to less than 1 ft. Flexible polyamide formulation makes it impervious to oils and gives it chemical stability and toughness necessary for compressed air lines used with portable air tools. It is lighter than rubber hose and will not kink.

Price: \$9-\$12 (per 100 ft.). Delivery: immediate.

Samuel Moore & Co., Mantua, Ohio. (P.W., 11/30/59)

Trend to Watch: Established Products Are Doing New (And Unexpected) Jobs

Bridgeport, Conn. — Don't discount that "blue sky" idea—it may pan out into a saleable product. Take the case of the lawn mower that turns into an outboard motor. Unconventional perhaps, but a powerful sales package.

The combination actually consists of lawn mower and outboard bodies, both run by the same motor. The ACCO Power Products Division of American Chain & Cable Co. makes the combination to retail for about \$150. The entire assembly weighs about 43 lb.

This was a case of a company expanding a market by finding a new use for an existing product. The "Outboard Mower" is an engine from ACCO's standard rotary lawn mower that has been direct-connected to a standard propeller assembly. The engine can be dismantled from the mower shell and made into an outboard trolling motor in a few minutes. Ordinary hand tools can be used.

Half the Cost of Both

ACCO general manager, M. Robert Wilson says "We will aim our immediate sales effort at the new homeowners, sportsmen, and boat owners. Having enough power and speed for varied needs, the introductory price will be about half the cost of a conventional lawn mower and outboard motor purchased separately."

The power source for this "convertible" is furnished by a 2½-hp., 4-cycle engine with a rated speed of 3,600 rpm. Company engineers estimate that with proper care the engine should provide more than 500 hours of use without major overhaul.

The new engine features a mechanical governor which replaces the usual vane-type. This compensates for additional power need (as pushing the car accelerator to get more power on a hill) and helps maintain a constant speed. The mechanical governor will throw the throttle wide open before the speed drops over 300 rpm.

Impulse-Type Starter

An impulse-type starter has been incorporated in the design to simplify getting under way. Its handle opens like a crank—three or four turns of the crank prime the motor and the engine starts when the handle is closed.

The entire outboard rig is 43-in. high, 10¼ in. for the engine and 32¾ in. for the propeller assembly. The propeller blade is 2 in. in diameter. At a test on Lake Tacoma, Washington, the motor propelled a 200-lb. 14-ft. boat with three men weighing an average of 175 lb. at speeds ranging from four to seven mph. With a single man aboard, the boat got up to 10 mph.

In another test on Long Island Sound, N. Y., the motor was mounted on a 13-ft. skimmer weighing 130 lb. It reached speeds of up to 8 mph. with a crew of three. Just prior to each outboard test, the 2½-hp. engine was used to power the rotary lawn mower in a typical grass cutting operation.

Outboard's all set, and away they go . . .



GAS MOTOR is removed from lawnmower shell by removing the cutting blade and muffer and loosening the three engine-mounting bolts.



HEAT EXCHANGER is fitted to motor using same gasket and two bolts that held mower muffer.



PROPELLER ASSEMBLY goes on next by fitting splined end of coupling to motor drive shaft. Three bolts are tightened to secure assembly.

Profitable Reading for P.A.'s

New Books

Directory of New York Importers. Published by Commerce and Industry Association of New York, Inc., 99 Church St., New York 7, N. Y. 238 pages. Price: \$5.00.

This publication is unique in that it gives detailed information about more than 2,100 import firms in New York. This alphabetical list of importers is an excellent reference book for business men seeking suppliers of imported products. The list includes each firm's name and address, date of establishment, bank reference, products that the firm imports, principal countries from which such products are imported, etc. This comprehensive publication also contains a cross-reference brand-name index.

The directory is designed to serve a dual purpose—to encourage imports from foreign countries and to promote the sale and distribution of imported goods throughout the United States.

Aids to

Purchasing

Steel Analyses

20-page pocket guide lists the compositions of 40 stainless steels, 184 alloy steels, and 105 carbon steels most often used in industry. It also contains Federal specifications with corresponding S.A.E., A.I.S.I. and A.M.S. numbers. Copies are available without cost from Reader Service Dept., Stainless and Strip Division, Jones & Laughlin Corp., Box 4606, Detroit 34, Mich.

From the

Manufacturers

Protective Coatings

Booklet tells how to use HumiSeal protective surface coatings in electronics applications. Gives information on phases of applying humidity-proof protective coatings, dipping procedures, draining, air-drying and curing. Covers vacuum impregnation, spray coating, silk screen



James B. Mackey, P. A., The Sloan Valve Company, Chicago

Purchase for Profit!

"We always specify Chicago Molded for plastic parts, says Purchasing Agent Jim Mackey of the Sloan Valve Company, and we're always sure of purchasing for profit. It's a combination of reliable custom molding service, finest quality, expert engineering assistance, the right price and on-time-delivery." Take the word of a man who knows, for help in plastic parts, call, specify:

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PRODUCTS CORPORATION
1029 North Kolmar Avenue Chicago 51, Illinois

coating, etc. Also contains charts and slide rule settings. *Columbia Technical Corp.*, 61-05 Thirty-first Ave., Woodside 77, Ill.

Cushion Couplings

Bulletin A669C, (12 pages). Discusses cushion couplings ranging from fractional to 190 hp. per 100 rpm. Couplings aid in cushioning shock loads and diminishing torsional vibration. Provides tables of horsepower ratings, prices, dimensions, and service factors for many applications. *Dodge Mfg. Corp.*, Mishawaka, Ind.

Silicone Rubber Compounds

CDS-170A, (12 pages). Contains product and application data on room temperature vulcanizing silicone rubber compounds. Current uses of compounds include potting and encapsulating of electrical equipment, high and low temperature sealing, and for flexible mold-making materials. Features suggestions for handling RTV compounds, curing and viscosity characteristics. *Silicone Products Department, General Electric, Waterford, N. Y.*

Plastic Pipe

Bulletin No. CE-80. Gives technical data on Ace-It plastic pipe for processing industries, utilities, irrigation, mining, etc. Pipe is said to be non-toxic, odorless and tasteless. Gives advantages of this pipe, installation procedures, fittings, etc. *American Hard Rubber Co., Division of Amerace Corp., Ace Road, Butler, N. J.*

Electric Control Centers

Bulletin PL6200 (16 pages) Describes advantages of using ac motor control centers. Units are available in several types and can be furnished with special control panels, lighting panels, operator's

panels, etc. Booklet includes specifications, space requirement tables for control components, etc. *Clark Controller Co., Cleveland, Ohio.*

Hydraulic Press Brakes

(16 pages) Describes company's line of hydraulic press brakes, giving specifications on models ranging in capacity from 150 tons to 1,800 tons. Also contains information on design details and photographs of typical models. *Verson Allsteel Press Co.*, 9300 S. Kenwood Ave., Chicago 19, Ill.

Annotated Computers

Release #959-380-30 (54 pages) Annotated Computer Bibliography includes theory and operation of analog computers and converters, digital computers and converters, peripheral equipment. Also lists applications. *Remington Rand Division, Sperry Rand Corp.*, 315 Fourth Ave., New York 10, N. Y.

Pillow Block Bearings

Catalog No. 51-59 (40 pages) Gives information on Pillow Block bearings and mountings, includes applications, variations, lubrication, and installation. Among pillow blocks described are single-bolt mountings, wall bearings, pedestal bearings, tri-arm bracket assemblies, etc. *Triangle Mfg. Co.*, 700 Division St., Oshkosh, Wis.

Data Processing Equipment

Preliminary Technical Publication N-07 (1). (48 pages) Gives information on company's line of data processing equipment. Includes digital data processing and analog and digital computing systems. Explains types of inputs and output devices. *Leeds & Northrup Co.*, 4934 Stenton Ave., Philadelphia 44, Pa.

Industrial Valves

Form 1012. (24 pages) Buyers Guide provides information on valve compari-

sons. Guide cross indexes company's line of valves with sixteen major manufacturers. Also contains a valve trim chart, figure number descriptions, a valve list conforming to federal specifications. *Ohio Injector Co.*, Wadsworth, Ohio.

Fluid Power Equipment

Bulletin 1005-H (16 pages) Covers equipment used with fluid power systems in the chemical, electrical, food, iron, steel, plastics, and many other industries. List includes variable delivery one and two-way pumps, automatic feed pumps, flange and combination ported valves, relief and foot valves, etc. *Oil-gear Co.*, 1560 West Pierce St., Milwaukee 4, Wis.

Aluminum Strip Conductor

Data sheets on aluminum electrical strip conductor include explanation of the product, both bare and anodized; production techniques; standard packaging procedures; chemical composition, etc. *Reynolds Metals Co., Public Relations Staff, Richmond 18, Virginia.*

Meetings You May Want to Attend

First Listing

Newspaper Purchasing Executives Conference—Netherland-Hilton Hotel, Cincinnati, Ohio, Jan. 29-30.

American Society of Mechanical Engineers—Gas Turbine Power Conference & Exhibit, Rice Hotel, Houston, Texas, March 6-9.

Previously Listed

NOVEMBER

Chemical Industries Exposition—Coliseum, New York, Nov. 30-Dec. 4.

DECEMBER

Catholic Hospital Association of the United States and Canada—Introductory Course in Hospital Purchasing, Hotel George Washington, Jacksonville, Fla., Dec. 7-11.

Materials Handling Institute—Annual Meeting, Savoy-Hilton Hotel, New York, Dec. 13-16.

1960

JANUARY

Southwest Heating and Air Conditioning Exposition—Memorial Auditorium, Dallas, Jan. 1-4.

Purchasing Agents' Association of Florida—6th Annual Buyer-Seller Meeting, Mayflower Hotel, Jacksonville, Fla., Jan. 14-16.

Institute of Surplus Dealers—10th Annual Trade Show & Convention, Trade Show Building, New York, Jan. 24-26.

11th Plant Maintenance & Engineering Show and Conference—Convention Hall, Philadelphia, Jan. 25-28.

Chemical Buyers' Group, N.A.P.A.—Mid-Winter Conference, (Mid-Western & Western Division), Hotel Congress, Chicago, Ill., Jan. 27-28.

National Association of Purchasing Agents—Public Utility Buyers Group, Mid-Winter Meeting,

Atlanta-Biltmore Hotel, Atlanta, Ga., Jan. 31-Feb. 5.

FEBRUARY

Instrument Society of America—Instrument-Automation Conference & Exhibit, Houston Coliseum, Houston, Tex., Feb. 1-5.

Chemical Buyers' Group, N.A.P.A.—Mid-Winter Conference, (Eastern Division), Hotel Commodore, New York, Feb. 3-4.

Wisconsin Petroleum Association—34th Annual Convention & Exhibit, Schroeder Hotel, Milwaukee, Feb. 24-25.

MARCH

Illinois Petroleum Marketers Association—Products and Equipment Show, Morrison Hotel, Chicago, March 8-9.

Institution Feed and Supply Show—Trade Show Building, New York, March 21-24.

Greater New York Safety Council—30th Annual Safety Convention and Exposition, Hotel Statler-Hilton, New York, March 28-April 1.

APRIL

23rd National Oil Heat and Air Conditioning Exposition—Coliseum, New York, April 4-7.

Purchasing Agents Association of Indianapolis—Indiana Industrial Show, Manufacturers Building, State Fair Grounds, Indianapolis, April 6-8.

American Welding Society—Annual Meeting & Welding Exposition, Hotel Biltmore, Los Angeles, April 25-29.

MAY

National Association of Purchasing Agents—45th Annual Convention and Inform-A-Show, Biltmore Hotel, Los Angeles, May 22-25.

JUNE

Canadian Association of Purchasing Agents—35th Annual Conference, Sheraton-Cadillac Hotel, Detroit, June 2-3.

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H. K. PORTER, inc.

Somerville 43 Mass.

Your Guide to New Products

(Continued from page 16)



Copying Machine

Takes Translucent Material

Whiteprint copying machine with 18-in. by any length capacity at 7 to 19-fpm. speeds. Will copy anything printed, typed, written or drawn on translucent paper at cost of 1¢ per copy. Unit has two controls: one for motor and lamp; other for speed.

Price: \$550. Delivery: immediate.

Reproduction Products Co., 12790 Westwood Ave., Detroit 23, Mich. (P.W., 11/30/59)



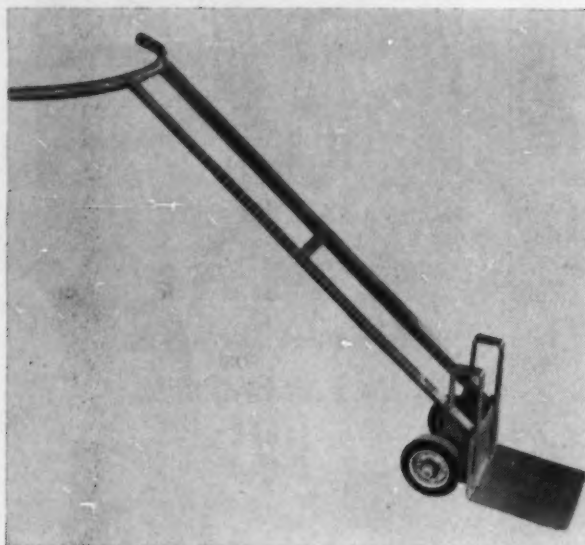
Inspection System

Radiographs 2-In. Steel

Iridium source pellet, hermetically sealed in aluminum capsule, gives a 60 deg. conical beam of radiation which is directed through piping up to 2-in. thick. Head, containing pellet, is strapped to pipe with nylon web belt and connected to remote control panel by 25-ft. cable. Exposure timer, red and green pilot lights and the on-off switch are battery operated. All of the equipment can be packed into a waterproof carrying case.

Price: \$1,460 (without source). Delivery: Jan. 1.

Picker X-Ray Corp., 25 S. Broadway, White Plains, N. Y. (P.W., 11/30/59)



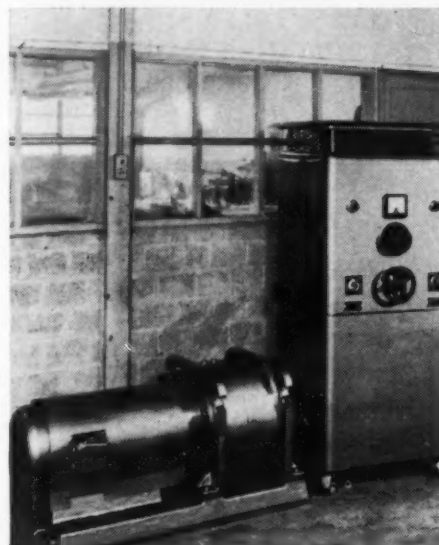
Hand Truck

Has 350-lb. Capacity

Operator places toe plate under the load and applies pressure to the handle to lift loads up to 350 lb. Truck will speed up handling of tote pans, kegs and other small, but heavy packages previously pushed or pulled manually. Weighs 44 lb.—overall dimensions are 36x10-in.

Price: \$46. Delivery: immediate.

Colson Corp., 7 S. Dearborn, Chicago, Ill. (P.W., 11/30/59)



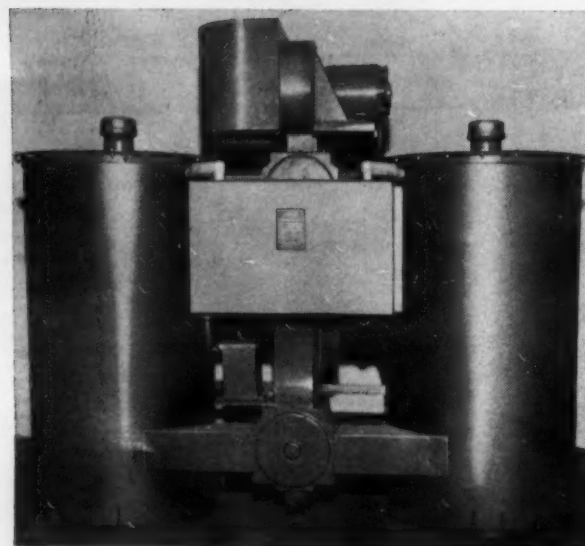
Spark Erosion Machine

Removes 6 Cu. In Per Hr.

Power supply unit allows high speed roughing, at removal rates up to 6 cu. in./hr. It consists of rotary impulse generator and control cabinet, and can be used with conventional spark-erosion machine tool to raise removal rate. Radii, fillets, and other complex shapes are reproduced in the metal leaving less than 1/32 in. for finishing by machine's normal power supply.

Price: \$13,000 (power supply), \$23,000 (tool and power supply). Delivery: 5 mo.

Easco Products, Inc., P.O. Box 587, Ypsilanti, Mich. (P.W., 11/30/59)



Dehumidifier

Takes Out Water

Automatic, packaged dehumidifier has adsorption and reactivation systems that can handle as much as 700 cu. ft. of air or gas per minute and remove 300 lb. of water in 24 hr. It may be used with electrical, steam, or gas reactivation. Installation requires only plug-in work.

Price: \$2,480. Delivery: 3 wk.

Universal Dynamics Corp., Box 9814 A, Arlington 9, Va. (P.W., 11/30/59)



Cleaner Transparentizer

In Aerosol Can

Spray can make opaque paper stocks transparent, ready for use as masters in making offset printing plates, diazo and silver emulsion reproductions. The spray can be used to clean soiled records, to restore deteriorated paper, and to seal master file copies of intermediate and one-sided materials. Pencil lines and smudges also can be removed from paper or linen records.

Price: \$2.95. (16 oz. can). Delivery: immediate.

General Aniline & Film Corp., 42 Exchange St., Johnson City, N. Y. (P.W., 11/30/59)

Purchasing Week Definition

Basic Computer Terms

Input Device: Converts facts into electronic impulses—computer language.

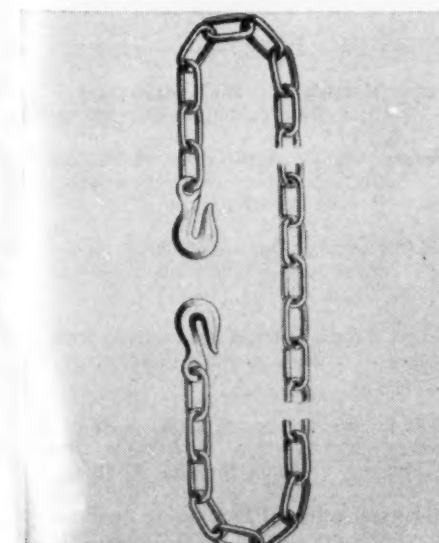
Output Device: Unit that translates computer results into usable or final form, such as payroll checks, or bills.

Input Storage: Holds each bundle of incoming facts while it awaits its turn to be processed. This allows successive bundles to be compared to make sure they're in the right order or for other control purposes.

Memory Storage: Holds standard information and some instructions; feeds them to processing when needed.

Intermediate Memory Storage: Serves as an electronic scratch pad that holds working figures temporarily until they are needed—releases final figures to the output device.

Stored Program: A set of instructions in the memory section that can run the computer, or cut in to take over from the regular program when the occasion arises. It is often used for alternate routines. (P.W., 11/30/59)



Towing Chains

Light-Duty Application

Drop-forged grab hooks looped into one of the chain links are said to give a secure hold. Warehouse and factories can use the zinc plated chain assembly for tow chains or emergency holding applications. Assembly comes in 4 sizes with 1/4-in. to 3/8-in. chain in 12 or 14-ft. lengths with grab hooks attached to each end. Shipped in cloth bag.

Price: \$2.25 (12 ft., 1/4 in.) to \$7.50 (14 ft., 3/8 in.). Delivery: 7-10 days.

American Chain & Cable Co., Inc., 929 Connecticut Ave., Bridgeport 2, Conn. (P.W., 11/30/59)

Getting Instant Information on Suppliers

Massive Data Stores Promise Quick Answers for Purchasers in a Hurry

When Bernard S. Benson (photo) came to this country in 1946, he had little idea that just four years later he would found the company that today stands near the top of the competitive field of automatic data handling and control systems. His company (Benson-Lehner Corp., Los Angeles) concentrates on communicating information. To use his own words, his role is "to bring buyer and seller together . . . by matching up people who are looking for things to buy with sellers, through massive information stores." Below, Benson answers PURCHASING WEEK's questions on the meaning of his "massive information stores" for today's purchasing agent.



BERNARD S. BENSON president of Benson-Lehner Corp. with "Oscar" one of his company's products, an oscillograph trace reader for expediting the analysis of trace records on either film or paper.

Q: Specifically, what do you mean by "massive information stores"?

A: I mean memory devices, whether they be cards, tapes, microfilm, or, more important yet, completely new concepts that are on the threshold of being born, into which vast amounts of data can be fed and from which specific pieces of information can be drawn in response to specific questions. This is the field often called data retrieval. I think a better term for it is data banking. Retrieving is only one part of the process—banking spans the concepts of investment, internal organization, and withdrawal.

Q: What general impact would such equipment have on the purchasing function?

A: In an ideal situation, imagine that a purchasing agent had complete and immediate access to the minds of all the potential suppliers in the world and to all their stores of information. He would then be in a tremendously powerful position to be sure that what he bought was the best possible item at the best possible price. Whereas this is an extreme case, this is the direction in which modern developments in memories are taking us.

Q: In what state of development are computer memories today?

A: More advanced than they were 10 years ago; in their infancy compared to what they will be 10 years from now. What is significant is that computer memories are already in many ways more advanced than the understanding of the techniques of how to use them.

Q: Is this equipment currently in use to provide a broad range of data in any particular field?

A: Yes. It is in use in connection with a large military project—the Army-Navy Instrumentation Program. Vast stores of knowledge in the field of aircraft instrumentation have already been put into a mechanized store and the information service has been available for the past year and a half to all of those contractors participating in the ANIP, SUBIC (Submarine Integrated Control), and SURIC (Surface Integrated Control) programs. It is possible for them to ask a question on a

teletype machine and in very short order get back answers as to what type of instruments are available, where and how they are used, etc. Benson-Lehner and Documentation, Inc., (with whom we plan to merge) have been doing some of the most advanced work in data banking.

Q: When might such information stores become available to purchasing agents in general?

A: At the moment, Documentation, Inc. is studying in detail a plan to provide such service for purchasing agents. We have the indexing, the coding, the machines, and all the basic facilities to fill stores with knowledge in essentially any field. The problem right now is to determine those fields where the need is the greatest. As soon as this is done, we can begin making the stores available.

Q: Could you provide a timetable, indicating when use of such stores would become a widespread practice in the purchasing field?

A: I am convinced that within three years from today there will be a significant dependence on the service by purchasing agents who have a fairly large breadth of information to cover. Within five to ten years a radically new type of memory will be developed that will enable one to search millions of documents. We are working on equipment now that would eliminate moving parts, shuffling of cards, or magnetic tapes, and that would not involved any complex machinery.

Although this project has not yet been successfully completed,

it has shown some interesting results. This would substantially change the picture for purchasing agents because all they would need would be a service to keep their stores of knowledge updated. They could have such equipment in their own offices and use it on a question and answer basis.

Q: How many of these information stores would there have to be in order to blanket the nation?

A: This has to do with the economics of communication as compared with duplication. It also has to do with the economics of technology. If the store is extremely expensive, then it is cheaper to attach many ears and mouths to it by telephone or teletype. If the store can be reduced substantially in cost, and I'm firmly convinced that it can, then it is cheaper to cut out the communication and have the duplication in the individual centers.

Q: Can you give us some idea of the economics of using an electronic information service in comparison with today's usual method of gathering data for industry?

A: Without wanting to evade the question, I think I can best answer it this way: The cost of searching for information today is very great. The cost of delays in industry or government programs while the search is going on is even greater. And the cost of not getting the answers, of having to design something that has already been designed, of using an inadequate component, of not

getting the lowest bid, all add up to still greater costs.

For example, we are at the moment designing a device aimed at large volume production. We need a particular type of clock mechanism in it. We can't afford to be wrong in our choice. We have had to write a letter, listing our specifications, distribute this to all the clockmakers in Germany, Switzerland, Japan, and the United States.

We will have to wait until we get all the answers and then we'll have to correlate them in order to find what we are looking for. This will probably take at least six weeks. With a dynamic information store kept continually updated, we could get this answer in minutes and the program would not be held up.

Q: In terms of dollars, how much of a saving can be anticipated in the purchasing function through the use of electronic information service?

A: First we have to start with what the service might cost. It may cost a small company \$500 a month. It may cost a large company \$10,000 a month. It may only cost \$25 a month to cover a small segment of knowledge.

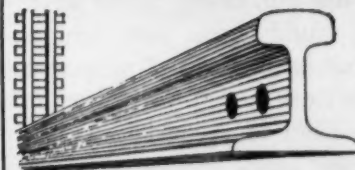
These costs could come down substantially if more people join into the service because the costs of accumulating the information are a large part of the total cost. The more people who are served, the more the price comes down per customer. These costs have to be matched against the present existing costs in order to get some idea of the saving.

I don't think it's unduly optimistic to say that, considering the

economic factors already mentioned, the cost of the service would be about one-tenth of what the present costs are for information. (Continued on page 20)

SEARCHLIGHT SECTION

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P-3029, Purchasing Week
620 N. Michigan Ave., Chicago 11, Ill.

Get Instant Information on Suppliers

(Continued from page 19)
tion, and of course the service will be far superior.

Q: Would this not also result in a saving in personnel?

A: The answer is specifically "yes." It is poor use of competent people's time to have everybody rushing off filing the same catalogues in many different companies, doing tremendous duplication which could be streamlined if the service were centralized, either by communication with the centralized store or by a centralized service providing a steady stream of updating information for individual data blanks.

Q: Getting to some of the specific capabilities of these information stores—would they reveal shortages of supply?

A: Yes. This is one of the simplest things for it to do. One doesn't even need a particularly sophisticated type of equipment for that.

Q: Would they be able to give up-to-date price information at any given moment?

A: Again, yes.

Q: How about delivery schedules?

A: Yes.

Q: Quality analysis?

A: This is a different sort of an animal and is more complex. In principle, yes, the system could greatly help. It could advise the purchasing agent as to what would be the best thing to do, not in a matter of judgment, but at least in supplying an enormous fund of up-to-date knowledge for quick and accurate decision-making.

Q: Would the person using these stores of information still be a purchasing agent or merely a clerk trained to use this equipment?

A: He will be more of a purchasing agent than he ever was before because the clerical work will be taken out of the job. His main function will be that of a decision-maker.

Q: Who will run and control the information stores?

A: It may be efficient for some of the information stores to be operated by the companies who own them, but by far the most efficient method would be for them to be owned and operated by specialized firms in the field whose business it is to suck in information, organize it, feed it into the recognized stores, and provide a highly efficient centralized answering service.

This would call for very close cooperation between the govern-

ment, which spends a lot of money to generate valuable information, and industry that can put this information to tremendous use. The cooperation would be made into an operational reality by the firms providing the data banking service.

Q: Could the equipment forecast changes in price and supply?

A: The machine cannot normally work on information it doesn't have. I say "normally" because it can extrapolate the future based on the past. In this very limited sense, yes, it could make predictions. But it cannot predict a steel strike or an earthquake, for instance, unless it is given some pretty strong clues.



"THE SYSTEM could greatly help. It could advise the purchasing agent as to what would be the best thing to do . . ."—Benson.

Q: Would you describe the mechanics by which a purchasing agent would avail himself of the knowledge of these memories?

A: This gets into the difficult area of communication between the human mind and the mechanized store. The first thing the purchasing agent would have to know is how to pose the question.

This may sound simple, but it is really quite difficult. You often find that a purchasing agent and an engineer can get quite involved in complex conversation, going through a series of devious paths to approach the particular target point of what the engineer really wants. At the beginning, neither the engineer nor the purchasing agent really knows. On the other hand, the engineer can often communicate very clearly to the purchasing agent exactly what he wants.

We have to consider two types of mechanized stores—one to which you can pose a specific question such as, "Where can I get a servo of such a size, of such specifications, at such a price, etc.?"

The other would be a type of system with which one could carry on a conversation such as, "What have you got in servos? . . . well, what I really mean is, what have you got in servos with gear box assemblies that have

been used in airborne applications . . . well, what I really mean is . . . etc. . . . etc. . . . Well, I don't really know if I'm looking for a servo, but I know I've got a problem."

Q: What special training would a purchasing agent need in order to become familiar with the techniques of asking questions?

A: It will depend on how the information service is set up. I believe that during the introductory years there will be a human being attached to the store who will have an estimated knowledge of the way it "thinks" and the purchasing agent will probably communicate with him. The question and answer formulation then evolve to communication between the purchasing agent and somebody on the end of a telephone who, in turn, will communicate with the machine.

This sort of middleman is not necessary in a relatively simple and straightforward question and answer situation where you know what you are looking for. However, as we make progress in evolving efficient methods of talking to machines, the purchasing agent of the future will be able to establish intimate contact with the memories without a middleman, even for complex situations.

Like most of these things, it sounds very complicated but becomes very straightforward when we increase our understanding and make progress.

Q: What course of action would you advise purchasing agents of today to take in order to prepare themselves for using these new aids?

A: Firstly, I would advise the development of a curious, interested attitude that will make him receptive to the advantages of tomorrow's technology. Secondly, the purchasing agent can give more thought to his present methods of extracting information so that he gains a better understanding of what his needs are. And thirdly, he should get together with experts in the field of data banking, begin to get to know them, and begin to discuss what data banking can do for the purchasing agent. Progress does not have to wait for tomorrow—we can already do a lot today.

Q: Presuming the systems would be used in government procurement, what would this do to reduce the cost of defense?

A: Of the billions of dollars that are spent in this country for defense, a big proportion is spent in doing again what we have already done before simply because we didn't know we had already done it. I would predict that, by minimizing duplication,

Port Houston Officials 'Declare War' On Rest of the Transportation World

New Orleans May Join Fight, but Solid Southern Front Unlikely in Fight to Stem Business Loss

Houston — Officials of this Gulf Coast port, in a declaration of "war against the rest of the transportation world," issued this advice to purchasing and traffic men last week:

"The routing situation may get confused in the next few months, but if buyers keep close tabs on shipping-rate fluctuations for each individual commodity, they'll be able to effect some important savings."

Prime movers in the "fight for the Gulf" are Houston port spokesmen who seek to rally other Gulf ports for a "united front" against the railroad and other coastal areas.

It was indicated New Orleans appeared ready to join Houston's "united front movement." But it was also apparent Gulf port solidarity was far from firm. A Mobile port official, for example, told PURCHASING WEEK his people "weren't worried about the competitive situation from the rail lines." He said they have been "doing all right so far without Houston's help."

But other members of the Gulf Ports Association have at least expressed interest in the Houston-inspired efforts to organize.

These were some of the pressures that led to Houston's "declaration of war":

• **Railroads:** Recent I.C.C. approval of railroad rate cuts on pulpboard shipments from Savannah, Ga., forced Seatrain Lines, Inc., to discontinue service from that city (see P.W., Nov. 2, '59, p. 1).

Houston men fear the Seatrain decision may be the beginning of a trend that could wind up by putting coastal and intercoast shipping lines out of business.

Officials at the nation's third largest port recently won an I.C.C. suspension of increased

the data retrieval systems could very well save 25% of our research and development costs, and this is a lot of money.

Q: What obstacles still remain in the development of massive information stores?

A: One is technology. We have whirling, grinding machines that are shuffling documents rather than retrieving data. These have to go. The second obstacle is that of language. We still have a great deal of study and research to do in solving the problems of communicating between two human minds through documents and machine stores.

The third problem is that of economics. It costs money to solve the first two problems. And the fourth main obstacle has to do with the psychological and sociological problems which are associated with any change. People will be reluctant to give up their own personal little systems, regardless of how inadequate they may be simply because they are their own personal little systems.

railroad switching charges at the Texas port. Encouraged by this, they've rounded up a "\$10,000 defense fund to employ counsel and a cost expert" to fight "88 active subjects now pending I.C.C. decision."

Among the so-called "active subjects," are rail line applications for lower rates on cotton bale, binder twine, green coffee, and steel.

• **North Atlantic ports:** North Atlantic ports are threatening to destroy a 20-year-old Gulf-East Coast price structure that provides Southern ports with rates 3% per cwt. under Baltimore rates on runs from and to the Midwest on trans-Atlantic traffic.

• **St. Lawrence Seaway:** "The Eastern railroads have publicly announced their intention to publish Seaway-competitive rates to North Atlantic ports," said an official of the Houston Port Bureau Inc., promotion office for the Texas port.

"This," he charged, "will force Seaway rate cuts and threaten much of our continent-to-Midwest traffic."

• **Pacific Coast ports:** West Coast port men have interested local railroads into publishing cargo rates from the Midwest which equalize through-costs with the Gulf.

Houston men feel they're liable to lose the Far East trade especially the big Chicago-to-Japan business.

"All these incursions on Gulf Coast business," said the Houston Port Bureau man, "have us in a panic. We hope we'll be able to settle our regional differences and get all the Gulf ports solidly behind us in efforts to defend our trade before the I.C.C."

Q: Are there any dangers in the use of massive computer memories that we would have to guard against?

A: There are many. There are the normal dangers associated with the fact that our normal method of operation is to press technology forward without any particular planning or thinking as to how to direct it to the good of civilization. There is a danger to the liberty of the individual. In planning, one often looks 25 years ahead.

There is also the great danger that, the moment information gets fed into a machine, people consider it sacred and it suddenly takes on increased validity in their minds. If the machine were fed false information that could be harmful to the people it could result in great damage. I feel that we must be very careful in training ourselves to realize that the integrity of the information in a machine is no greater than the integrity of the person who puts it there—and sometimes this is not as high as it should be.

Experts Seeking Signs of Hope In 80-Day Truce

(Continued from page 1)
pute remain deadlocked and a new strike started in mid-January, it would only add fuel to those negotiations that are already firing up. And they would be held under the gun of compulsory strike-settling legislation in Congress.

With one-quarter of the steel injunction period already passed, the signs of peaceful settlement are almost non-existent. The United Steelworkers have rejected the latest steel industry offer, and federal mediators were not pushing the parties into further contact at the bargaining table for the time being.

Little Interest

Even the broad peace "feelers" coming out of A.F.L.-C.I.O. headquarters aren't scoring. When President Eisenhower agreed to approach industry with federation president Meany's labor-management summit conference idea, it was done with only a vague hope of success. Meany asked the conference to talk peace with management after warning that a new steel strike could be "heating up" during the T-H injunction.

But, management groups showed little enthusiasm for sitting down to chat with labor leaders. The National Association of Manufacturers said such a conference "might as well not be held" unless unions agreed before and that the union shop, labor political activity, working rules and other labor causes should be dropped.

This is about as popular as asking union officials to give up overtime pay.

Bitter Bargaining Ahead

In this somewhat bitter labor-management context, negotiators are getting set for some big bargaining. Besides railroad negotiations, the aircraft industry will face the machinists and United Autoworkers in joint negotiations. The two unions hold a preliminary bargaining strategy conference in January.

In the electrical industry, the traditionally caustic foes—General Electric Co. and James B. Carey's Electrical Workers Union—will go at it again in 1960 after a five year contract layoff.

Also in the wings are the usual round of negotiations in telephones, glass, trucking and so on. In a usual bargaining year, settlements could be expected without any extra trouble. But, with the steel dispute hanging fire the prospects are anything but peaceful.

New York Barge Canal Closes Down for Winter

Albany, N. Y.—The New York State Barge Canal system will be closed Dec. 4 for the winter season unless freezing weather requires an earlier shutdown.

The State Public Works Department said that any vessels or barges in the canal after 4 p.m. Dec. 4 will be ordered to tie up at the nearest canal terminal for the winter.

Steel's Hangover: How Bad, How Long

(Continued from page 1)
which have resulted in cost savings.

Steel Prices—Premiums of up to 100% have been paid to get needed steel.

And these premiums are being paid by some of the nation's largest corporations. One large auto firm puts it this way: "Our main job is to keep production lines going. To do so we recently combed the country and had to pay \$75-\$100 per ton more than the usual \$140 per ton for steel sheet."

A detailed assessment of the survey's findings follows:

1. CURTAILED OUTPUT

—As noted above, more than 25% of the companies surveyed report some degree of production cutback. For the steel producing and using firms taken alone, the figure was much higher—in the 35-40% range.

The percentage of cutback was also significant. Of the companies that had curtailed production, the average output reduction reported amounted to 26%. This percentage is the same for steel users and non-steel users alike.

One big transportation equipment company reveals the magnitude of the problem by pointing out that "barring a miracle, we will have to layoff 1,500 workers in mid-December—with a resulting sharp drop in output."

2. HOW CUTBACKS WERE ACHIEVED

—In effecting the above curtailment, 50 companies report that this has been achieved by layoffs. Some 46 report a shortened workweek. And 37 report that they have had to shut down some operations.

Included in these totals are some duplications where companies reported that more than one of these techniques was used.

No matter how you look at these cutbacks, the result is the same—a cut in workers' take-home pay. This could have important local effects on Christmas season sales.

3. PRODUCTION LOW POINTS

—Of all the companies affected, one-third report that they have already reached the low point in their production. The majority of the others expect that point to be reached in December. Only about 10% expect to reach their lows after the first of the year.

Generally speaking, it's the steel-using industries that expect low points in early 1960. "It will at least be another month," says one irate machinery P.A., "before I can even hope to reverse our sharp downtrend in production."

4. PRODUCTION SNAP-BACK

—Here you can best evaluate the over-all impact of the steel strike. For some 65% of the companies affected said that they do not expect to get back into normal production until early 1960.

Breaking this 65% figure down: 26% say normality will return in January. Another 16% say they will have to wait until February. And a surprisingly large 23% note that regular production schedules will not be resumed until March or thereafter. Again, it's the steel-using in-

dustries that expect the biggest lag—before they can get back to normal operating schedules.

5. SUBSTITUTIONS—With steel unobtainable, many purchasing men report a growing use of substitute materials. In some instances, the substitutions have proved so satisfactory that they will be retained even after the steel products are again available.

One company, for example, that couldn't get steel "U" bolts found that aluminum bolts were "just as satisfactory—and with added advantages."

Note that a wide variety of these materials can and have been replacing steel. While aluminum is the primary replacement, it's by no means the only one. Paper, fiber, plastics, glass, and wood have all proved their worth in the present emergency.

While it's still too early to assess the impact of this substitution, it could prove quite significant over the longer pull. For a substitution made in one production area can very well mark the start of a new trend—a trend that could spread to all types of industry.

6. NEW STEEL SOURCES

—30% of the companies reporting say that they are getting steel from other than their normal sources. Some 20% report using other domestic sources. The other 10% are relying on imported steel. (Here again there are duplications—that is, companies using both sources).

These additional sources may pay off in the future. With more than one supplier competing for business, it could mean discounts when things get back to normal.

7. STEEL PREMIUMS

—20% report paying premium prices for their steel. The average comes to about 35% above the normal price (including extra freight, expediting charges, etc.). Some 11 companies report paying premiums of 100% or more.

One company that usually buys from steel companies directly had this to say: "We have had to cover short items through warehouse purchases. We have already spent in excess of one million dollars in premiums."

8. SHORTAGES—As noted above, a long list of items in short supply is reported by the nation's purchasing executives. These items (some 125 in all) are listed on this page.

This list is not meant to be all-inclusive because it only contains those products reported to us by respondents. Also no distinction is made between items noted 10 or 20 times by P.A.'s—such as forgings—and an item reported as short by only one single P.A.

Nevertheless, it provides a good indication of the general supply outlook for steel, steel products, and products using steel. Moreover, in certain instances, it can put you on the alert for possible shortages over the next few months.

9. NON-STEEL STOCKS

—Nearly 35% of the companies report that their "other than steel" inventories are normal. Some 28% report higher inventories and 18% report lower inven-

What They're Using Instead of Steel

Item	Substitute
Spinnings (machinery)	Aluminum
Cold rolled	Hot rolled
Galvanized steel sheets	Aluminum
Rolled from sections	Aluminum extrusions
Steel stampings	Aluminum
Steel shafts	Aluminum
Steel Drums	Fiber drums
Electric Conduits	Aluminum
1 quart cans	Aluminum
Steel windows	Wood windows
Plastic molding compounds	By-Products of coke for plasticizer
Metal cans	Ice cream cartons
Tanks	Aluminum
Container tops	Wood tops
Flashing	Aluminum
Screw machine parts	Nylon (Thermo-mold products)
Steel sprayer booms	Aluminum
5 gal. containers	Glass carboys
5 gal. containers	Polyethylene
Steel parts	Plastic
Steel desks	Wood desks
Electric wire drums	Aluminum fiber drums
Steel shelving	Wood
Steel drums	Paper drums
Turned and polished shafting	Cold rolled
U bolts	Aluminum
Strapping	Press, sensitive tapes
Forged equalizer beams	Aluminum forging
Sheet steel	Aluminum
Maintenance items	Plastic and aluminum

(In addition, there were many substitutions among various grades of steel itself, the survey showed.)

tories. Most of these companies with abnormal inventories do not expect readjustments to normal until the spring of 1960 or later.

Curiously, some of these higher inventories are a direct result of the steel strike. For example, many textile and paper suppliers to steel users report a sharp drop off in demand from their customers. As one large paper mill put it, "Our operations have been curtailed and our inventories are up because our customers won't buy paper if they can't get steel."

10. SALES—Nearly 55% of the respondents note that their firms' sales have not been affected. Some 15% report higher sales. Some 30% report lower sales. These percentages are approximately the same for both steel users and non-steel users.

11. NON-STEEL PRICES

An overwhelming 85% note general stability in non-steel prices. Only 15% say they're paying higher prices now.

In many instances where higher quotations are reported, they are due to other strikes. Copper, for example, where it is still available, commands almost 40¢ per lb.

Other increases, of course, are more directly tied to steel. Thus, the rise in some products containing steel can be traced to their generally tight supply.

12. COST PASS-THROUGHS

—On the subject of passing along higher costs, P.A.'s were about equally divided. One group thought that market conditions would not warrant any price increases at this time. Typical replies included:

"We are absorbing the increases because our customers will not pay any more."

"Competition forces us to ab-

sorb higher costs of operation."

On the other hand, there were many purchasing men who thought that these firms would eventually pass on all increases. Typical answers of this group included:

"Any increase in raw material prices will be passed along. We expect a 2% rise."

A large manufacturer of railroad equipment indicates that his firm is unable to absorb any more cost increases—if it is to remain a profitable operation.

One farm equipment company noting that it has recently had a 5% increase in material costs and a 3% boost in labor says "these higher costs must be passed on."

Another manufacturer (of electrical office equipment) looks for a "general increase of 5% within the next six months."

Plumbing Items Jump a Flat 5%

New York—Plumbing fixtures for the new home market have been hit with a flat 5% price hike, and manufacturers are contemplating similar increases for industrial fittings.

Leading plumbing fixture producers said that while industrial fittings were not included in the current price jump, higher tags probably can be expected on those items when new contracts are signed with the United Steelworkers Union.

The 5% increase put into effect by Crane Co., Chicago; American Radiator & Standard Sanitary Corp., New York; and Murray Corp. of America's Eljer Co. division, Pittsburgh, among others, primarily affects new home plumbing items.

Purchasing Perspective

NOV. 30-
DEC. 6

So long as Mr. McDonald and Mr. Cooper refuse to shake hands over a signed labor contract, amateurs can compete with experts in business prognostications.

The formula is simple. Just hang the forecast on a great big "IF"—whether a new steel agreement can be reached before next Jan. 26.

Assuming a settlement, one can be exuberantly optimistic. The sky is the limit in predictions on the course of such standard economic measurements as G.N.P., auto production, steel output, and the industrial production index in first-half 1960. Meantime many of the more sophisticated forecasters also talk hazily of a second half slowdown in 1960, and possibly a recession in 1961, once the post-steel strike surge is spent.

All signals are off, of course, if the steelworkers strike the mills again in late January. Then the picture becomes "cloudy," "muddled," "extremely uncertain," and also full of "political implications."

But just for the record, here are currently most popular readings on what's ahead in 1960 (based on an optimistic "IF"):

• **Allocation of most-wanted items in steel supplies for most, if not all, of the January-June period.** For the entire year, record-breaking production of 130-million ingot tons.

• **Near record auto sales of between 6.7 and 7 million cars,** including some 700,000 of the compact models and 500,000 foreign imports.

• **Sustained high interest rates.** Already the highest in a quarter century, charges may yet go up another ½% before next June.

• **Those magic numbers—Gross National Product and the Federal Reserve production index—will hit new highs.** G.N.P. is forecast for a smashing \$500 billion (a long hike up from the current steel-depressed rate of \$478.6 billion). Industrial production (now down to 148) is expected to hit 165% of the 1947-'49 average.

• **A gradual upward push in prices—2-3¢, maybe as low as 1¢.**

And with industry promising a 10% increase in capital spending (signifying basic industrial optimism), 1960 adds up to a boom year—by even modest standards—without major inflation . . . provided, of course, steel prices toe the line.

TRAFFIC JAM—Mill traffic managers are working overtime to head off shipment delays when finished steel products begin moving out in volume during the next two to three weeks. But some mills fear railroads and truckers may not be able to supply sufficient equipment in some areas.

WAREHOUSE LAG—Lack of activity at steel service centers illustrates the old Army hurry-up-and-wait routine in sweating out arrival of new steel supplies. Now down to total inventories of about 1.2 million tons (compared to 3.7 million last July), warehouses don't expect to show inventory increases for a month.

Tool steels, tubing, alloys, stainless, and cold finished bars will build up fastest. Carbon products, sheet, and galvanized will be the slowest items to recoup.

New Rotating Engine Has Only 2 Moving Parts

(Continued from page 1)

important engine development since the diesel. No price tag has been set, but company officials say it will be "competitive" with present engines.

Roy T. Hurley, chairman and president of Curtiss-Wright, foresees an almost limitless market, including autos, trucks, planes, boats, pumps, compressors, and Curtiss-Wright's own "aerocar". They expect to have the first commercial applications out of the lab sometime in 1960.

Hurley claimed the new engine would "set new standards for internal combustion engine performance." He went on to say it would put "twice the power in half the space." The announced fuel consumption figure of less than .045 lb. of gas for each hp.-hr. was described by experts as superior to anything but a diesel.

Many Details Still Secret

Many of the engineering details of the engine are still secret and some industry observers were waiting to see all the facts before evaluating the development.

The engine weighs about 1-lb. per hp. in steel, and Curtiss-Wright claims this figure could be halved with aluminum construction. The rotating feature of the engine keeps extreme temperatures from building up in any one spot, so high performance metals aren't needed.

Curtiss-Wright developed the power plant jointly with N. S. U. Werke of West Germany. Curtiss-Wright is concentrating on engines in the 100 to 700 hp. class, and has models in the 750 to 5,000-hp. range under development. N. S. U. Werke has been pushing work on 5- to 100-hp. units—primarily for its line of motorcycles and small cars.

Meanwhile, turbine researchers of the big three auto companies were reported working at a pace "more frantic than ever before." "We are trying to match 30 years of progress on reciprocating engines in the two years left on our turbine timetable," one company representative told PURCHASING WEEK. This could mean that automobile turbines could be on the road by 1961.

The 75-hp. turbine developed

How the Curtiss-Wright Engine Works

The single chamber is oval shaped. A three-sided (roughly triangular) rotor spins inside it. The three corners of the rotor touch the chamber walls, forming three separate (but rotating) chambers.

1. As the rotor turns, a carburetor injects a fuel-air mixture into one of the chambers. The rotor turns, and carries the mixture to chamber 2.

2. Because the second chamber is smaller than the first, the mixture becomes compressed. A sparkplug explodes the gas, which in turn moves the rotor, rotating the crankshaft.

3. The rotor continues to the third position where the spent gases escape through an exhaust port.

All three operators occur simultaneously, giving an almost continuous intake, compression-ignition-expansion and exhaust cycle. This method of operation eliminated all valves, pistons, springs, and other moving parts commonly associated with an internal combustion engine.

by Williams Research Corp. is said to be the first low horsepower regenerative turbine. A regenerative turbine returns exhaust gas heat to the combustion chamber, increasing the over-all

operating efficiency of the engine.

Williams claims the engine will be "more than competitive with automotive diesel or air-cooled reciprocating engines of comparable output."

Overseas Steel Output Won't Help U. S. Buyers if the Strike Resumes

(Continued from page 1)

future deliveries, despite the uncertain steel situation in the U. S.

Although steel capacity has been and is being expanded, Britishers deny there's been any expansion of capacity to meet U. S. needs.

Individual mills queried say there is little likelihood of a new demand spurt from American steel buyers. They reason:

• **Delivery dates have lengthened** to as much as six months for some steel items.

• **The U. S. strike has had worldwide effects** and has produced tremendous economic pressure which could force a settlement before the 80-day injunction runs out.

Steel mills here also are reluctant to accept U. S. orders now which they say would be another "temporary phenomenon." They are out to secure stable and predictable markets.

Latest export quotations on selected steel items, f.o.b. British ports, show universals and broad-flange beams at about \$112 per long ton; Ferro-concrete rounds, \$113.4 per long ton; and sections (angle basis), \$111.

Bonn—Despite the U. S. steel strike, orders from the U. S. have not played a major role in the recent growth of German order backlog.

Most mills here say orders had been large during February-April of this year when American firms stocked up for the anticipated strike, but very few orders were placed in Germany during the strike itself nor are sizable U. S. orders expected for the near future.

The present boom of the German steel industry is mainly due to increased domestic consumption which traditionally accounts for 80% of German steel sales. This is contrary to Belgium and Luxembourg operations, for instance, where about 80% of the output is for export.

Another factor discouraging U. S. orders, German mill spokesmen say, is that delivery times

have now increased to an average slightly over three months. Fine gage sheets, however, have delivery times of four to five months while heavy plates and shipbuilding plates can be delivered with five to six weeks.

Present prices for exports are: heavy plates, \$112-\$118 per ton; shipbuilding plate and ship profiles, \$120 per ton; bar steel, \$112; structural steel, \$102; wire rod, \$125-\$128; medium sheet, \$120; and fine gage sheet about \$175 per ton.

Brussels—Steel makers in Belgium hope the end of the United States strike may relieve pressure for higher prices which has been on the upswing since last April.

Mills here blame the order boom from the states, which now has apparently run its course, for creating a local shortage of wire rod, barbed wire, and small merchant bars. Local delivery delays now are running into months on some of these and other items.

Current indications suggest that U. S. demand for Belgian steel will continue to slack off, allowing mills to straighten out their currently complicated order situation.

Tokyo—Japanese steel manufacturers report U. S. demand here is running contrary to the order situation in most other foreign countries.

Producers report that this week they turned down U. S. orders running nearly 200,000 tons of sheet metal because they had no capacity to meet the demand and that short term orders, they feel, do not make it worthwhile to expand steel production capacity.

Steel products now being exported are from pre-strike orders totaling 870,000 tons, worth \$1,330,000.

Japanese are worried that refusal to accept American orders may affect their exports to the U. S. in future. A spokesman for Japan's Steel Production Committee commented, "We may be obliged to set up new export targets."

Price Changes for Purchasing Agents

Item & Company	Amount of Change	New Price	Reason
INCREASES			
Gum Rosin, N. Y., cts., Water White, cwt.....	.15	\$12.49	short supply
Window Glass, cwt.....	.20	\$11.95	short supply
Nancy, cwt.30	\$11.25	short supply
Katy, Mary, cwt.....	.20	\$11.10	short supply
Copper Oxide, red, 90%, usn-type, bbls., lb.....	.015	.485	metal boosts
Cupric Chloride, anhyd., dms., lb.....	.0075	.4475	metal boosts
Benzene, Nitration, major producer, tnkr., gal.....	.03	.34	high demand
Fir Plywood, sanded, ¼", 1000 sq. ft.....	\$4.00	\$68.00	strong demand
Low Sulfur Grade Fuel Oil, #6, N. Y., Phila., tnk., bbl..	.10	\$2.75	short supply
Gum Rosin, ecc, Window Glass, cwt.....	.20	\$9.70	short supply
Nancy, Katy, Mary, cwt.....	.20	\$9.50	short supply
REDUCTIONS			
Acrylic Fiber (courtelles), Courtaulds, 3, 4½, 6 den., lb..	.04	\$1.16	competition
Acrylic Carpet Fiber, Chemstrand, 15 denier, lb.....	.08	.93	competition
Copra, Coast, ton.....	\$5.00	\$225.00	
Gum Turps., So., gal.....	.01	.53	
Camphor, Pwd., nat., ton lots, lb.....	.02	.53	
Titanium Alloy, all-beta, Crucible Std., lb.....	\$1.00-\$1.50	prod. econs.
Ethyl Benzoate, bbls., lb.....	.15	.75	
Mercury, 76-lb. flask.....	\$4.00	\$214.00	oversupply
Nylon Yarn, women's wear, 15-denier, lb.....	\$1.10	\$4.00	Eurpn. comp.
Fluorocarbon Resin (Teflon), Du Pont, trklld, lb.....	.50	\$3.60	

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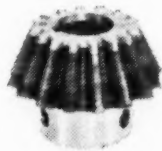
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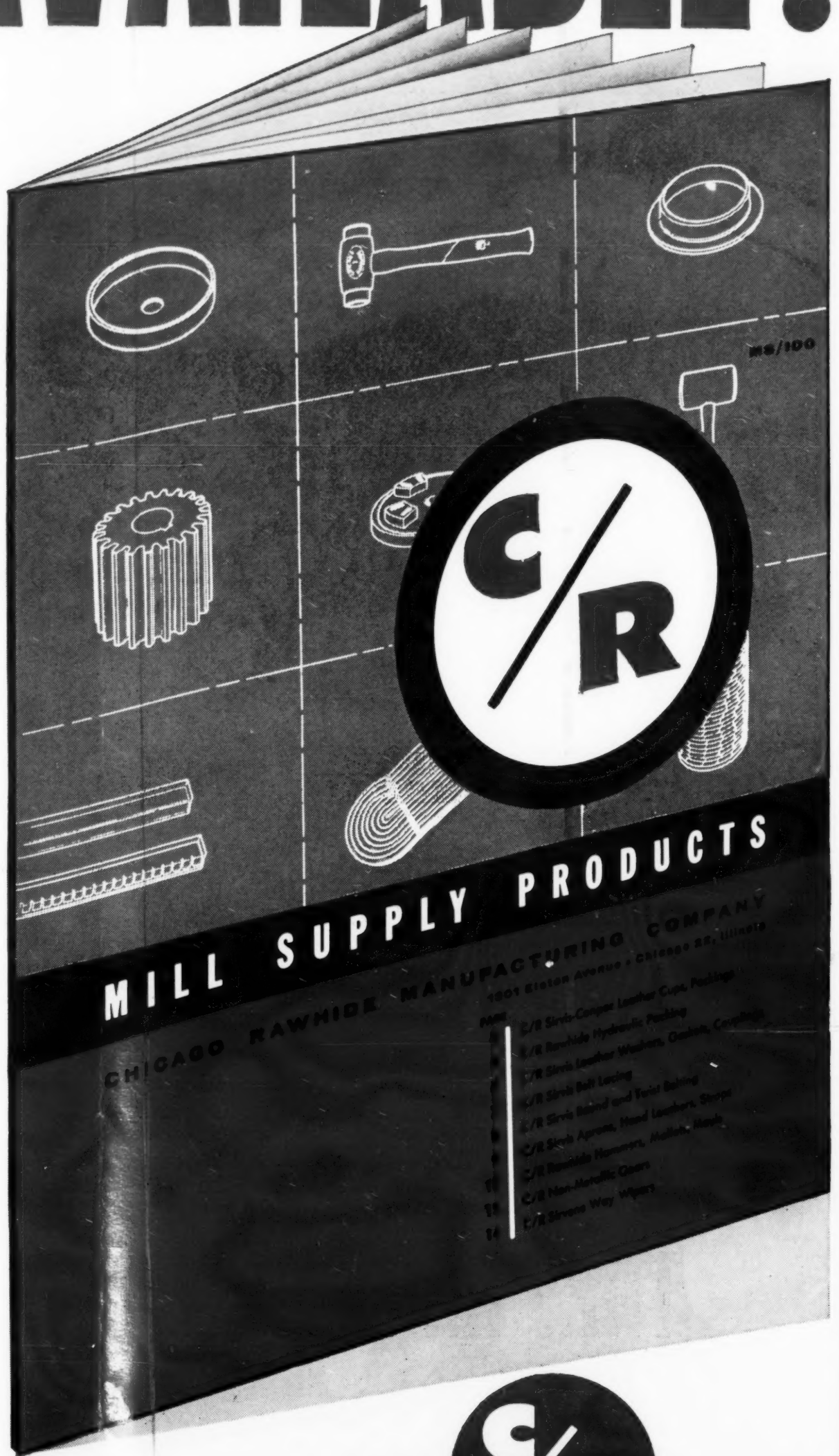
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